

Your **Power** for Health



greiner bio-one



Greiner Bio-One Product Catalog

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Company History

Greiner Holding AG was founded in 1868 in Nürtigen, Germany by Carl and Emilie Greiner. The company began as a manufacturer of cork stoppers and closures. Their products were so highly sought after that the company grew quickly.

Over the years, Greiner's expertise expanded from cork to foam and plastic and from manufacturing to engineering, design and precision production.

Today, Greiner Holding AG is a world leader in innovation, engineering and manufacturing. The Greiner Group is present in 31 countries, with 132 sites and more than 9,722 employees and annual revenues in excess of \$1.4 billion. Although the face of Greiner has changed since its humble beginnings, Greiner's dedication to providing affordable solutions with superior quality and unsurpassed performance remains the same.

Greiner Bio-One North America, Inc. is a subsidiary of Greiner Bio-One GmbH which is globally recognized as a leader in the manufacturing arena and is part of the Greiner Group. Products for the Preanalytics, Bioscience and OEM divisions are manufactured here and shipped throughout North America.

Bioscience Division

Greiner Bio-One was specifically created with the introduction of the first plastic petri dish in 1963 and is now a leading technology partner to academia, research establishments, diagnostic, pharmaceutical, and the biotechnology and healthcare industries. The Bioscience product range provides innovative plastic solutions for high-throughput screening and protein coated cell culture and tissue culture products for diagnostic screening and drug development. These products can be seen in research and academic labs, as well as, General Labware products being available to the healthcare field.

In addition to laboratory consumables, the Bioscience division stays at the forefront of new technologies by providing solutions for applications such as 3D cell culture, small laboratory equipment, and mass cell culture.

Preanalytics Division

Greiner Bio-One was among the first companies to pioneer safer, more economical plastic medical devices, introducing the world's first plastic evacuated blood collection tubes in 1985. The Preanalytics product range for blood and specimen collection is now leading the way in innovations such as venous blood collection tubes with significantly lower draw volumes.

In 2003, Greiner Bio-One launched the VACUETTE® line of safety products. Since that time, the Preanalytics division has grown substantially year after year in both VACUETTE® collection and safety devices. This is due to high product performance and unmatched training and customer support, serving a wide range of customers such as hospitals, physician offices, veterinary and reference laboratories.

OEM Division

In addition to our Bioscience and Preanalytic divisions, there is also an OEM or Original Equipment Manufacturing division which provides customers with custom made solutions to suit their needs. Our OEM group is happy to discuss ideas and create the perfect solution to the customers individual needs and specifications.

Quality Assurance and Control

We have a control system which monitors the physical, chemical and biological quality of our products. The checking of quality starts with the incoming raw material, is continued in the production processes and ends with the dispatch of the finished product. Strict controls, conducted according to the legal provisions and specific standards, accompany the product. Ongoing quality training ensures that our employees are informed about the applications of our products and the quality requirements placed on them.

All products can be traced back to their production period, machine operators and tools, all the way back to the starting materials used.

Conclusion

At Greiner Bio-One, we understand that confidence and trust in your suppliers is critical. With that in mind, we are committed to manufacturing to the highest quality standards possible and ensuring that we understand the customers needs and expected outcomes.

Our top-notch Customer Service Department has earned a 100% approval rating from customers in the past 3 years and it is our goal to continue to offer the best possible customer experience at all times.



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Advanced TC™

A novel polymer modification changes the surface in such a way as to increase primary and long-term adhesion of cell cultures and positively influences cell-dependant features and functions.

AMPLiseal™

A transparent 500 µm polypropylene sealing film coated with an acrylate adhesive, AMPLiseal™ is noted for low autofluorescence, particularly at wavelengths critical for Real Time PCR. Strong adherence provides reliable microplate sealing to minimize evaporation without influencing PCR reactions or fluorescence measurements.

CELLCOAT®

Protein coated culture vessels for adherent cell culture. Our CELLSTAR® product family is coated with Collagen Type I, Poly-D-Lysine or Poly-L-Lysine. Custom coatings are available by special request.

CELLdisc™

Multi-layer cell culture format that is easy to use and promotes scalability from research to commercial-scale applications.

CELLMASTER™

Sterile roller bottles made of either Polystyrene, which is TC treated, or Polyethylene terephthalate (PET), which is not TC treated.

CELLreactor™

A filter top tube that can be used as a small bioreactor for suspension and spheroid cell culture, facilitating miniaturization of large scale setups and maximizing the number of parallel experiments.

CELLSTAR®

Sterile cell culture vessels for adherent and suspension cultures. CELLSTAR® products for adherent cultures are physically modified to incorporate polar groups, such as carboxy and hydroxy groups into the plastic surface, making it hydrophilic. This significantly improves the adhesion of cells and the binding of proteins to the plastic surface. CELLSTAR® products for suspension culture are not modified and thus retain the natural hydrophobic properties of polystyrene.

CELLSTAR® Cell-Repellent Surface

A new surface chemistry to effectively inhibit cell adhesion. The low cell attachment characteristic is achieved through an innovative chemical polymer modification that does not degrade or leach under common cell culture conditions.

CELLview™

Imaging dishes, slides, and microplates with cover glass bottom to provide optimal parameters for your sophisticated microscopic applications.

ComboPlate™

Developed with Hampton Research as a universal platform for crystallization in a 24 well format, the ComboPlate™ has an automation-friendly footprint. The CrystalBridge™ for sitting drop and round glass coverslips for hanging drop crystallization are available for use with the ComboPlate™.

Cryo.s™, Datamatrix Cryo.s™, and Biobanking Tubes

Sterile vials for cryogenic storage of cells, tissue and other solutions and samples. Available barcoded and with datamatrix code.

CrystalQuick™

High Throughput protein crystallization plates enabling sitting drop crystals in a 96 well plate format. Available with square-round well-top, flat bottom or round well-top, round bottom crystallization wells. Low Birefringent (LBR) versions are available for polarized-light imaging.

CrystalQuick™ Plus

Our CrystalQuick™ plates with a modified hydrophobic surface, which are particularly well suited for nano liter crystallization of cell membrane proteins. Also available in LBR versions.

CrystalSlide™

A plastic 12 micro-channel platform for Counter Diffusion Crystallography within a standard microscope slide format. Automated handling is facilitated by housing four slides in a slide holder with standard microplate footprint. Superior material properties renders excellent suitability for *in-situ* X-ray data collection and structure determination and crystal analysis under polarized or UV-light.

EASYseal™

An adhesive-based plate sealer for everyday laboratory applications.

EASYstrainer™ Cell Strainer

For filtration of Cell Suspensions and Primary Cell Isolates.

FLUOTRAC™

Immunological products made of black polystyrene for fluorescence measurements. Available in high and medium bind formats.

Leucosep™

Highly translucent polypropylene tubes (12 mL & 50 mL) with a high grade polyethylene porous barrier incorporated into the tube. This prevents mixing of the sample material and the separation medium as well as recontamination after separation. Available as unfilled and pre-filled tubes.

LUMITRAC™

Immunological products made of white polystyrene for luminescence measurements. Available in high and medium bind formats.

MASTERBLOCK®

Deep well, polypropylene microplates ideal for storage of active agents, patient samples, biomolecules and reagents. Available in 96 well (0.5, 1, and 2 mL), 384 well (240 µL) and 1536 well (18 µL) formats.

MICROLON®

Immunological products made of clear polystyrene for transmission measurements. Available in high and medium bind formats.

MiniCollect®

Capillary blood collection products including tubes, straws, funnels and lancets.

OncoQuick®

A sterile 50 mL polypropylene tube with a porous barrier inserted above the specially developed separation medium for the enrichment of disseminated, circulating tumor cells from peripheral blood.

QUICKSHIELD

Safety tube holders that are equipped with a rotational safety shield which encloses the needle safely after venipuncture, thus preventing needlestick injuries.

Sapphire

A product family comprising a full line of PCR reaction vessels, as well as, standard, filter, and low retention pipette tips.

SCREENSTAR Microplates

Developed for new applications in high-content screening and high-resolution microscopy in drug discovery and research. Manufactured entirely of cycloolefin, these microplates reduce optical distortions and have a recessed cycloolefin film bottom to enable imaging of perimeter wells.

SensoPlate™

24, 96, 384, 384 Small Volume™ and 1536 well microplates with optically clear, borosilicate 175 µm glass bottoms, suitable for transmission measurements down to 350 nm. The adhesive used to mount the glass bottoms contains the lowest possible autofluorescence. For sensitive or transformed cell lines, it may be necessary to pre-coat glass bottom plates with synthetic or natural proteins such as Poly-Lysine or Collagen.

SILVERseal™

An aluminum foil, acrylate adhesive-based plate sealer that is pierceable and temperature resistant. Ideal for storage of sample material and active agents and standard PCR.

ThinCert™

Tissue culture inserts for multiwell plates consisting of polystyrene housings and sealed PET capillary pore membranes. Assorted pore sizes and densities for applications including transportation, diffusion and secretion studies, invasion and migrational experiments, cytotoxicity testing, co-cultures, Trans Epithelial Electric Resistance (TEER) measurements, as well as primary cell culture.

µClear®

A processing technique for production of microplates with ultra-thin transparent film bottoms, without the use of adhesives or solvents which eradicates the risk of leaking wells. The µClear® film has exceptionally low autofluorescence and extends the wavelength range down to 340 nm.

UV-Star®

By combining the patented µClear® process technology to an innovative UV-transparent material, Greiner Bio-One has created microplates in 96, 96 Half-Area and 384 well formats with extended transmission ranges down to 230 nm.

VACUETTE®

High-quality, pre-evacuated blood and specimen collection products.

VanishPoint®

An automatic safety blood collection set with one-handed activation of the trigger to virtually eliminate needle exposure.

VACUETTE® VISIO PLUS

A needle for blood collection equipped with a translucent plastic hub/view window which provides visual "flash" confirmation of successful venipuncture.

VIEWseal™

A non-tacky, pressure sensitive, highly transparent plate sealer for precise optical measurements. Ideal for real-time PCR and protein crystallography.

N3d Biosciences

Magnetic system for 3D Cell Culture, either by levitation or bioprinting, within dishes, multiwell and microplates. Enables mimicking of native tissue environment with rapid 3D formation within hours.

Where indicated, Greiner Bio-One products are:

Free of detectable DNase, RNase and human DNA

DNases and RNases are essential and ubiquitous enzymes which protect the living organism against the invasion of foreign DNA and foreign RNA. DNases and RNases are cell components which also occur in body fluids. Because of the great potential for transmission (e.g. skin, hair, etc.), overalls, gloves and hairnets are worn in all production areas. The most sensitive method available, the PCR method, is used to check for contamination with DNase, RNase or human DNA. DNase, RNase and human DNA free products are labeled in our catalog.

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

Free of endotoxins

Endotoxins are complex lipopolysaccharides which are components of the outer membrane of gram-negative bacteria. These substances are the most widespread and effective members of a group of so-called pyrogens that cause fever in humans. The LAL assay (Limulus Amoebocyte Lysate) used to test for freedom from endotoxins complies with the FDA guidelines for medical products (12/87). Greiner Bio-One works with the sensitive detection limit of ≤ 0.06 EU/mL. Endotoxin-free products are labeled in our catalog. (The US Pharmacopoeia guidelines stipulate that eluates from medical devices [e.g. washing liquids from consumable materials] must show endotoxin levels of < 0.5 EU/mL. For materials that come into contact with cerebrospinal fluid, a level of < 0.06 EU/mL is required.)

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

Sterile

The validation of our products is conducted in accordance with ISO 11137. Related to this standard, the bioburden (germ level) is established for each product and periodically repeated. Based on this data the necessary sterilization process is conducted. Products labelled as sterile are routinely monitored. In-Vitro Diagnostic and Medical Devices appear with an SAL (Sterility Assurance Level) of 10^{-6} , other sterile products meet an SAL of 10^{-3} .

Tested – immunological products

The binding properties of all immunological products are tested with a competitive ELISA (enzyme-linked immunosorbent assay). The CV (coefficient of variation) limits of our products are as follows: MICROLON® CV $< 5\%$; FLUOTRAC™ and LUMITRAC™ CV $< 10\%$. We guarantee a shelf life of 4 years for immunological product lines.

Tested – cell culture products

All cell culture products are physically surface-treated and are tested with different cell lines. Morphology, cell growth and cell vitality are monitored in the testing process. A broad spectrum of cells, ranging from primary cells, mammalian cells and human cells to insects cells, enable comprehensive testing.

Free of cytotoxicity

In many experiments, toxic effects on cells or tissue cultures play an important role particularly in the field of *in vitro* diagnostics. The relevant culture vessels and all objects that come into direct contact with the cells and tissues must therefore be free of cytotoxic substances (All cell culture relevant end products are checked for freedom of cytotoxicity). The detection of cytotoxicity is evaluated with mammalian cells according to EN ISO 10993.

non-
cytotoxic

Barcode Service:

When large quantities of samples and information are being processed, automated identification offers an efficient means of organization and management. The application of individual linear barcodes on microplates or Cryo.s™ represents an expedient method of facilitating identification, handling and storage of biological and medical samples. Machine-readable labels with linear barcodes can be implemented in any workflow system. The risk of manual transcription errors as well as the time and cost involved with sample management is thereby decreased.



Linear Barcoding of Microplates and Cryo.s™

Barcoded Microplates:

- Adhesive labels in different sizes
- Automated processes can be used to attach labels at given specifications on outer perimeter microplate sidewalls
- The product options include 96, 384 or 1536 well microplates made of polypropylene, polystyrene, cycloolefin and other materials
- Linear and Datamatrix Code options
- Labels are resistant to solvents, temperature fluctuations and smudging. Reading accuracy is guaranteed
- Low minimum order requirement

Barcoded Cryo.s™:

- Direct print on Cryo.s™
- Print is solvent-resistant to ethanol (up to 70%) and DMSO (up to 50%)
- Availability of all prevalent barcode symbologies (e.g. Code 128, Code 39, 2/5 interleaved, EAN, HIBC) in various tube sizes (1 mL, 2 mL, 4 mL or 5 mL Cryo.s™ with internal or external thread)
- Screw cap color can be chosen as desired
- Low minimum order requirement of one original Cryo.s™ tube box
- Prospective number sequence on bag and box
- 100 or 150 coding cap inserts per original box



Datamatrix Cryo.s™ and Biobanking Tubes

- Large data capacity
- Laser-written for improved durability and resistance to mechanical strain and chemicals
- Compatible with automated liquid handling and de-/re-capping systems
- Readable with up to 22% of code deteriorated.



Cryo.s™ Cryogenic Storage Vials

- Sterile, free of detectable endotoxins, non-cytotoxic
- Available in a variety of sizes
- Supplied with an internal thread for 1 mL, 2 mL and 5 mL or an external thread for 2 mL & 4 mL
- Starfoot base versions facilitate single hand opening and closing with 40 position rack
- Available with white scratch-resistant writing area
- Pigmented screw caps enable easy identification of samples for organized storage
- Cryo.s™ meets the pressure requirements for transportation by aircraft

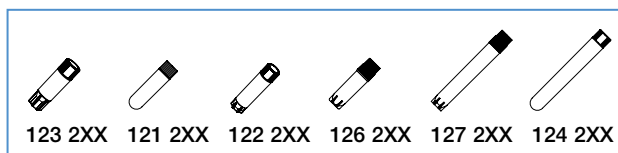
Free of detectable DNase, RNase, human DNA, non-pyrogenic

non-cytotoxic

For freezing samples Greiner Bio-One offers a user-friendly system that includes a variety of different CE-marked Cryo.s™ with an appropriate support rack.

Cryo.s™ are suitable for frozen or vapor phase liquid nitrogen storage of cell cultures, tissue samples, microbiological samples (e.g. viruses, bacteria, yeast and other fungi, spores), material of human or animal origin, such as blood, serum and sperm as well as antibodies, RNA, DNA and protein samples. (Cryo.s™ are not intended for sample storage within reproductive medicine)

GBO Cat. No.	Volume (mL)	Tube Thread	Bottom Shape	Self Standing	Cap Color	ID Field	Star Foot	Silicone Gasket	# of Cap Inserts	Sterile	Pack Qty	Case Qty
123261	1	Internal	Conical	Yes	Clear	No	Yes	Yes	150	Yes	100	500
123263	1	Internal	Conical	Yes	Clear	Yes	Yes	Yes	150	Yes	100	500
123277	1	Internal	Conical	Yes	Green	Yes	Yes	Yes	150	Yes	100	500
123278	1	Internal	Conical	Yes	Yellow	Yes	Yes	Yes	150	Yes	100	500
123279	1	Internal	Conical	Yes	Blue	Yes	Yes	Yes	150	Yes	100	500
123280	1	Internal	Conical	Yes	Red	Yes	Yes	Yes	150	Yes	100	500
121261	2	Internal	Round	No	Clear	No	No	Yes	150	Yes	100	500
121263	2	Internal	Round	No	Clear	Yes	No	Yes	150	Yes	100	500
121277	2	Internal	Round	No	Green	Yes	No	Yes	150	Yes	100	500
121278	2	Internal	Round	No	Yellow	Yes	No	Yes	150	Yes	100	500
121279	2	Internal	Round	No	Blue	Yes	No	Yes	150	Yes	100	500
121280	2	Internal	Round	No	Red	Yes	No	Yes	150	Yes	100	500
122261	2	Internal	Round	No	Clear	No	Yes	Yes	150	Yes	100	500
122263	2	Internal	Round	Yes	Clear	Yes	Yes	Yes	150	Yes	100	500
122272	2	Internal	Round	Yes	Orange	Yes	Yes	Yes	150	Yes	100	500
122277	2	Internal	Round	Yes	Green	Yes	Yes	Yes	150	Yes	100	500
122278	2	Internal	Round	Yes	Yellow	Yes	Yes	Yes	150	Yes	100	500
122279	2	Internal	Round	Yes	Blue	Yes	Yes	Yes	150	Yes	100	500
122280	2	Internal	Round	Yes	Red	Yes	Yes	Yes	150	Yes	100	500
126261	2	External	Round	Yes	Clear	No	Yes	No	150	Yes	100	500
126263	2	External	Round	Yes	Clear	Yes	Yes	No	150	Yes	100	500
126277	2	External	Round	Yes	Green	Yes	Yes	No	150	Yes	100	500
126278	2	External	Round	Yes	Yellow	Yes	Yes	No	150	Yes	100	500
126279	2	External	Round	Yes	Blue	Yes	Yes	No	150	Yes	100	500
126280	2	External	Round	Yes	Red	Yes	Yes	No	150	Yes	100	500
127261	4	External	Round	Yes	Clear	No	Yes	No	100	Yes	50	300
127263	4	External	Round	Yes	Clear	Yes	Yes	No	100	Yes	50	300
127277	4	External	Round	Yes	Green	Yes	Yes	No	100	Yes	50	300
127278	4	External	Round	Yes	Yellow	Yes	Yes	No	100	Yes	50	300
127279	4	External	Round	Yes	Blue	Yes	Yes	No	100	Yes	50	300
127280	4	External	Round	Yes	Red	Yes	Yes	No	100	Yes	50	300
124261	5	Internal	Round	No	Clear	No	No	Yes	100	Yes	50	300
124263	5	Internal	Round	No	Clear	Yes	No	Yes	100	Yes	50	300
124273	5	Internal	Round	No	Red	Yes	No	Yes	100	Yes	50	300
124274	5	Internal	Round	No	Blue	Yes	No	Yes	100	Yes	50	300
124275	5	Internal	Round	No	Green	Yes	No	Yes	100	Yes	50	300
124276	5	Internal	Round	No	Yellow	Yes	No	Yes	100	Yes	50	300



Additional white Cryo.s™ Cap inserts available 50 per case as 304171P.



Cryo Storage Box For Cryo.s™ Sample Tubes

- 9x9 division holds 81 Cryo.s™ sample tubes
- Opaque appearance of lid for optimum visibility of box content
- Venting holes for facilitated air exchange between interior and exterior
- Easy lid removal
- Temperature and shock-resistant polypropylene for a storage temperature range of -90°C ~ 121°C

The Cryo Storage Box fits all 1 and 2 mL Cryo.s™ with internal and external thread. It is compatible with standard LN2 containers and metal racks.

GB0 Cat. No.	Description	Color	Bag Qty	Case Qty
802202	Cryo Storage Box, lid clear	Clear	5	20
802203	Cryo Storage Box, lid clear	Red	5	20
802204	Cryo Storage Box, lid clear	Blue	5	20
802206	Cryo Storage Box, lid clear	Yellow	5	20
802225	Cryo Storage Box, lid clear	Green	5	20
304171P	Cap inserts for Cryo.s	White	50	50



Cryo Support Rack

- Suitable for Cryo.s™ with starfoot base (Cat. No. 122 XXX, 123 XXX, 126 XXX, 127 XXX)
- Improved handling since the tubes can be opened with one hand
- Rubber base to prevent slipping
- Offers space for up to 40 Cryo.s™

GB0 Cat. No.	Description	Color	Bag Qty	Case Qty
802501	Support Rack for Cryo.s, 40 position with lock star for foot	Blue	1	1

Greiner Bio-One Your Partner for Biobanking

With more than 30 years of experience in the field and continuous product development; Greiner Bio-One now offers a comprehensive range of state-of-the-art solutions for large biorepository cryo storage. Certified according to ISO 9001 and ISO 13485, Greiner Bio-One manufactures in an ISO class 8 clean room, employing the highest standards in production hygiene, polymer selection and quality control.

Product Purity and Sterility

- Sterility assurance level 10⁶
- ISO 11137 sterilization procedure
- No human DNA (real time PCR)
- No DNase (real time PCR)
- X-ray (48 way) or E-beam (96 way)
- No heavy metals contained
- No endotoxins (limulus amoebocyte lysate test)
- No RNase (reverse real time PCR)
- Non cytotoxic (ISO 10993)



Cryo.s™ with Datamatrix Code Datamatrix Coding Service for Cryogenic Storage Tubes

- Zero leachate polypropylene, medical grade and USP class VI certified
- Medical grade silicone gasket
- Laser-written ECC200 Datamatrix
- Reed-Solomon error correction for high redundancy of encrypted information
- Strong resistance to mechanical and chemical damage
- High data capacity
 - Sequential sample IDs or consistent characters
- Each Datamatrix is proof-scanned
 - Availability of four different tube sizes

Cryo.s™ with Datamatrix may be ordered either **off the shelf** or **on demand** with predefined or customized number sequences, respectively. Cryo.s™ tubes ordered off the shelf carry Datamatrix codes chosen from a sequence pre-defined by Greiner Bio-One. Each code is unique and will not be found on any other cryogenic tube from Greiner Bio-One. All customized orders are processed via order form F071 004 Order form Cryo.s™ with Datamatrix. Minimum order amount: one (1) original carton.

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Description Cryo Tube	Description 2D Barcode	Packaging Unit
122 263-2DG	2 mL Cryo.s with internal thread	14x14 Datamatrix, sequence: G200000001, G200000002, ...	500 per box
123 263-2DG	1 mL Cryo.s with internal thread	14x14 Datamatrix, sequence: G300000001, G300000002, ...	500 per box
126 263-2DG	2 mL Cryo.s with external thread	14x14 Datamatrix, sequence: G600000001, G600000002, ...	500 per box
127 263-2DG	4 mL Cryo.s with external thread	14x14 Datamatrix, sequence: G700000001, G700000002, ...	300 per box



Datamatrix Cryo Rack Rack for 48 Cryo.s™ with Datamatrix

- ANSI/SLAS I-2004 standard footprint rack for ease of automated handling
- Scanning windows in rack bottom for scanning without tube removal
- Stackable
- Temperature resistant polypropylene with a temperature range of -196°C ~ +30°C
- Choice of rack configurations:
 - Rack without lid for 1 mL, 2 mL, 4 mL and 5 mL Cryo.s™ – 30.0 mm high
 - Rack with small lid for 1 mL and 2 mL Cryo.s™ – 52.5 mm high
 - Rack with high lid for 4 mL and 5 mL Cryo.s™ – 88.5 mm high

GBO Cat. No.	Description	Color	Bag Qty	Case Qty
803202	Datamatrix Cryo Rack, with small translucent lid	Black	5	20
803270	Datamatrix Cryo Rack, with high translucent lid	Black	5	15
803277	Datamatrix Cryo Rack, without lid	Black	5	20



Datamatrix Cryo Rack Rack for 81 Cryo.s™ with Datamatrix

- Temperature resistant polycarbonate with a temperature range of -196°C ~ +37°C

GBO Cat. No.	Description	Capacity	Height (mm)	Rack/Lid Material	Rack Color	Lid Color	Packaging size
802506	81 way box w/ high profile lid	81	88.1	PC	Black	Neutral	10
802576	81 way box w/ low profile lid	81	52.0	PC	Black	Neutral	10

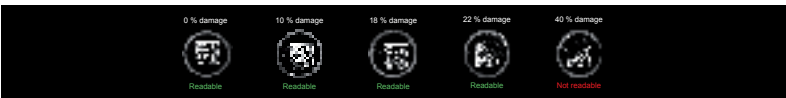


Figure 1: Datamatrix error correction. Codes were partially damaged using a hot stamp and readability was assessed. Partially damaged codes remained readable.



96 way Cryo.s™ with Datamatrix Code Datamatrix Coding Service for Cryogenic Storage Tubes

- Height-reduced screw cap conserves up to 30% freezer space
- Ultra-sharp 2D code
- Zero leachate polypropylene, medical grade and USP class VI certified
- Medical grade silicone1 gasket
- ANSI/SLAS 1-2004 standard footprint rack for ease of automated handling

Cryo.s™ with Datamatrix may be ordered either **off the shelf** or **on demand** with predefined or customized number sequences, respectively. Cryo.s™ tubes ordered off the shelf carry Datamatrix codes chosen from a sequence pre-defined by Greiner Bio-One. Each code is unique and will not be found on any other cryogenic tube from Greiner Bio-One. All customized orders are processed via order form F071 004 Order form Cryo.s™ with Datamatrix. Minimum order amount: one (1) original carton. Products listed below have a writing area and natural screw cap.

Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

Overview product versions and features

Product description	300 µL tube, pre-racked in 96-way rack	300 µL tube, pre-racked in 96-way rack	600 µL tube, pre-racked in 96-way rack	600 µL tube, pre-racked in 96-way rack	1000 µL tube, pre-racked in 96-way rack	1000 µL tube, pre-racked in 96-way rack	96 screw caps in cap carrier
Material of tube and cap:	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Working volume* [µL]:	235	235	580	580	975	975	-
Total rack height with lid on [mm]:	21.6	21.6	36.2	36.2	53.9	53.9	-
Packaging size [qty./case]:	960 tubes/ 10 racks	960 tubes/ 10 racks	960 tubes/ 10 racks	960 tubes/ 10 racks	960 tubes/ 10 racks	960 tubes/ 10 racks	960 caps/ 10 cap carriers
Sterility:	sterile	non-sterile	sterile	non-sterile	sterile	non-sterile	non-sterile
Coding:	Pre-produced 2D code on tube, 2D code and linear barcode on rack						

Product description:		Ordering information (REF numbers)						96 screw caps in cap carrier, non-sterile
		300 µL tube, pre-racked, sterile	300 µL tube, pre-racked, non-sterile	600 µL tube, pre-racked, sterile	600 µL tube, pre-racked, non-sterile	1000 µL tube, pre-racked, sterile	1000 µL tube, pre-racked, non-sterile	
-	Non-capped:	-	976570	-	977570	-	978570	-
•	Natural cap:	976561	976580	977561	977580	978561	978580	385270
•	Green cap:	976566	976586	977566	977586	978566	978586	385276
•	Yellow cap:	976565	976585	977565	977585	978565	978585	385275
•	Blue cap:	976564	976584	977564	977584	978564	978584	385274
•	Red cap:	976563	976583	977563	977583	978563	978583	385273
•	Pink cap:	976568	976588	977568	977588	978568	978588	385278
•	Brown cap:	976569	976589	977569	977589	978569	978589	385279
•	Black cap:	976567	976587	977567	977587	978567	978587	385277
	Rack Only:		976501		977501		978501	

* Working volumes indicate the maximum volume of sample which may be frozen in the tube without the risk of excessive pressure inside the tube. Please note that if distilled water is frozen (e.g. for testing purposes), ice plugs may form with yet unfrozen water entrapped below. During freezing the entrapped water will expand and apply pressure onto the tube wall; hence, the tube may develop fissures. This phenomenon is not observed with any common sample type such as blood, serum, cell suspension and buffered solutions of DNA or other extracts. In order to securely avoid contact of the frozen sample with the lower portion of the screw cap, it is recommended to not fully exploit nominal working volumes. Some sample types tend to form air bubbles entrapped in the frozen material, thus contributing to the total sample volume. It is recommended to empirically determine and apply suitable maximum working volumes with these sample types.



Cryo.s™ Rack Scanner

- Scans and decodes one rack in 8-10 seconds
- Decodes 2D codes on Cryo.s™ with Datamatrix in 48 way racks and Cryo.s™ Biobanking tubes in 96 way racks
- Optional rack identification based on rack-integrated datamatrix code
- One touch scan button, single tube scan feature
- Anti-fog treatment on inside scanning surface

GBO Cat. No.	Description	Box Contains
849050	Cryo.s Rack Scanner, US edition	1 scanner, power cables, USB cables, drivers and manual



Cryo.s™ 8-Channel Handheld Decapper

- Ergonomic design
- Reliably decaps and caps eight Cryo.s™ Biobanking tubes in parallel
- Stable stand for storage of device and contamination-free parking of screw caps
- Eight individual motors for precise application of 7 Ncm torque for tube closure
- Power-saving mode for longer operating time in wireless mode

GBO Cat. No.	Description	Box Contains
852070	Cryo.s 8-channel Handheld Decapper	1 decapper, power cable, stand, manual

Experience *Sapphire* Filter Tip Technology

Sapphire filter tips are manufactured from the highest quality raw materials and precision tools to provide you with unsurpassed accuracy and precision. *Sapphire* filter tips are available sterile and low retention. These tips come packaged in sterile, individually wrapped racks that are easy to use and refillable.

Sapphire Perfect Fit

Experience the perfect fit with every tip using our patented technology. You'll be confident of a secure seal thanks to our flexible proximal end.

Clean Delivery

Our low retention resin technology means a tip that needs no coating, resulting in a uniform ultra-low retention composition throughout the tip to maximize sample recovery. This precision tip eliminates hanging droplet formation, ensuring sample precision delivery by reducing surface tension at the distal end of the tip.



Sapphire Filter Pipette Tips

- Easy and reliable fit to pipettor
- Low liquid retention
- Graduations for perfect visual control
- Filter ensures protection from contamination
- 96 tips per pack

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

GB0 Cat. No.	Description	Sterile	Racks/Pack	Packs/Case
Filter Tips – Low Retention				
771235	10 µL Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
771265	10 µL Extended Length, Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
773265	20 µL, Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
772265	100 µL, Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
737265	200 µL Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
738265	300 µL, Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
750265	1250 µL Extended Length, Graduated	Yes	8 Rks of 96/Pk	5 Pks/Cs
Filter Tips				
771287-US	10 µL, Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
771261	10 µL Extended Length, Natural Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
773261	20 µL, Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
772288-US	100 µL, Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
738261	300 µL, Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
738261-US	200 µL, Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
750261	1250 µL, Natural, Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs

*All Pipette Tips are sold by the pack. To order a case, please order the correct number of packs.



Sapphire Low Retention Pipette Tips

- Easy and reliable fit to pipettor
- Low liquid retention
- Graduations for perfect visual control
- Eliminates hanging droplet formation
- Environmentally friendly refill option
- 96 tips per rack

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

GBO Cat. No.	Description	Sterile	Racks/Pack	Packs/Case
771246	10 µL Natural Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
771251	10 µL Natural Graduated Extended Length	Yes	10 Rks of 96/Pk	5 Pks/Cs
737251	200 µL Natural Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
738251	300 µL Natural Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
750251	1250 µL Natural Graduated	Yes	8 Rks of 96/Pk	5 Pks/Cs
Reloads				
771258	10 µL Natural Graduated Extended Length	No	10 Rks of 96/Pk	5 Pks/Cs
737258	200 µL Natural Graduated	No	10 Rks of 96/Pk	5 Pks/Cs
738258	300 µL Natural Graduated	No	10 Rks of 96/Pk	5 Pks/Cs
750258	1250 µL Natural Graduated	No	8 Rks of 96/Pk	5 Pks/Cs



Sapphire Pipette Tips

- Easy and reliable fit to pipettor
- Graduations for perfect visual control
- Environmentally friendly refill option
- 96 tips per rack

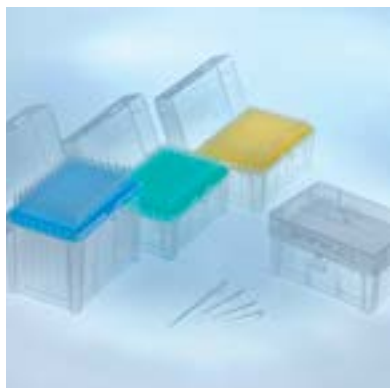
Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

GBO Cat. No.	Description	Sterile	Racks/Pack	Packs/Case
771242	10 µL Natural Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
771252	10 µL Natural Graduated Extended Length	Yes	10 Rks of 96/Pk	5 Pks/Cs
737252	200 µL Natural Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
738252	300 µL Natural Graduated	Yes	10 Rks of 96/Pk	5 Pks/Cs
750252	1250 µL Natural Graduated	Yes	8 Rks of 96/Pk	5 Pks/Cs
771287- US	10 µL Natural Graduated	No	10 Rks of 96/Pk	5 Pks/Cs
771254	10 µL Natural Graduated Extended Length	No	10 Rks of 96/Pk	5 Pks/Cs
737254	200 µL Natural Graduated	No	10 Rks of 96/Pk	5 Pks/Cs
738254	300 µL Natural Graduated	No	10 Rks of 96/Pk	5 Pks/Cs
750254	1250 µL Natural Graduated	No	8 Rks of 96/Pk	5 Pks/Cs

*All Pipette Tips are sold by the pack. To order a case, please order the correct number of packs.

Sapphire Pipette Tips Cont.

GBO Cat. No.	Description	Sterile	Tips/Pack	Packs/Case
	Reloads			
771257	10 µL Natural Graduated Extended Length	No	10 Rks of 96/Pk	5 Pks/Cs
737257	200 µL Natural Graduated	No	10 Rks of 96/Pk	5 Pks/Cs
738257	300 µL Natural Graduated	No	10 Rks of 96/Pk	5 Pks/Cs
750257	1250 µL Natural Graduated	No	8 Rks of 96/Pk	5 Pks/Cs
	Bulk			
770290	10-200 µL Natural Gel Loading Tip	No	1,000 tips/Pk	10 Pks/Cs
771290- US	10 µL Natural Graduated	No	1,000 tips/Pk	10 Pks/Cs
771250	10 µL Natural Graduated Extended Length	No	1,000 tips/Pk	10 Pks/Cs
737290	200 µL Yellow Graduated	No	1,000 tips/Pk	10 Pks/Cs
737291	200 µL Natural Graduated	No	1,000 tips/Pk	10 Pks/Cs
738250	300 µL Natural Graduated	No	1,000 tips/Pk	10 Pks/Cs
740290- US	1000 µL Blue Graduated	No	768 tips/Pk	10 Pks/Cs
750250	1250 µL Natural Graduated	No	768 tips/Pk	10 Pks/Cs



Racks

- Stackable
- Double hinged lid for smooth opening/closing action
- Lids are reversible to enable 'push fit' opening/closing action

GBO Cat. No.	Description	Sterile	Tips/Pack	Packs/Case
	Unfilled Racks			
970310	Empty racks 10 µL with Red Insert	No	10 Rks/Pk	5 Pks/Cs
970320	Empty racks 200 µL with Yellow Insert	No	10 Rks/Pk	5 Pks/Cs
970330	Empty racks 300 µL with Green Insert	No	10 Rks/Pk	5 Pks/Cs
970350	Empty racks 1250 µL with Blue Insert	No	10 Rks/Pk	5 Pks/Cs

*All Pipette Tips are sold by the pack. To order a case, please order the correct number of packs.



Serological Pipettes Individually Packaged, Paper/Plastic Wrap

- Paper/plastic packaging permits peel-off and break-through function
- Fine line graduation printing contributes to accuracy of at least +/- 2%
- Negative graduations provide increased volume versatility
- Reverse (ascending and descending) graduations on 5, 10, 25 and 50 mL pipettes
- Cotton plugged and color-coded according to international convention
- Lot number and best before date on each individual wrap

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Volume (mL)	Graduations (mL)	Color Code	Negative Graduations	Ascending / Descending Graduations	Material	Sterile	Individually Packaged	Pack Qty	Case Qty
604181	1	1/100	Yellow	0.25 mL	No	PS	Yes	Yes	200	1000
710180	2	1/100	Green	0.5 mL	No	PS	Yes	Yes	200	1000
606180	5	1/10	Blue	2.5 mL	Yes	PS	Yes	Yes	50	200
607180	10	1/10	Orange	3.0 mL	Yes	PS	Yes	Yes	50	200
760180	25	2/10	Red	10.0 mL	Yes	PS	Yes	Yes	50	200
768180	50	1/2	Purple	10.0 mL	Yes	PS	Yes	Yes	20	100



Serological Pipettes Individually Packaged, Plastic/Plastic Wrap

- Plastic/plastic packaging permits peel-off function that provides user-friendly easy opening and aseptic pipette removal, reduced contamination risk and particulate-free opening
- Fine line graduation printing contributes to accuracy of at least +/- 2%
- Negative graduations provide increased volume versatility
- Reverse (ascending and descending) graduations on 5, 10, 25 and 50 mL pipettes
- Cotton plugged and color-coded according to international convention
- Lot number and best before date on each individual wrap

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Volume (mL)	Graduations (mL)	Color Code	Negative Graduations	Ascending / Descending Graduations	Material	Sterile	Individually Packaged	Pack Qty	Case Qty
604160	1	1/100	Yellow	0.25 mL	No	PS	Yes	Yes	50	1000
710160	2	1/100	Green	0.5 mL	No	PS	Yes	Yes	50	1000
606160	5	1/10	Blue	2.5 mL	Yes	PS	Yes	Yes	50	200
607160	10	1/10	Orange	3.0 mL	Yes	PS	Yes	Yes	50	200
760160	25	2/10	Red	10.0 mL	Yes	PS	Yes	Yes	50	200
768160	50	1/2	Purple	10.0 mL	Yes	PS	Yes	Yes	20	10

See page 52 for the Sapphire Pipette Controller.



Serological Pipettes Bulk Packaged

- Durable bulk packaging helps eliminate bag puncture and zip-lock closure helps maintain product sterility
- Fine line graduation printing contributes to accuracy of at least +/- 2%
- Negative graduations provide increased volume versatility
- Reverse (ascending and descending) graduations on 5, 10, and 25 mL pipettes
- Cotton plugged and color-coded according to international convention
- Lot number and best before date on each bulk pack

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Volume (mL)	Graduations (mL)	Color Code	Negative Graduations	Ascending / Descending Graduations	Material	Sterile	Individually Packaged	Pack Qty	Case Qty
604107	1	1/100	Yellow	0.25 mL	No	PS	Yes	Yes	25	1000
710107	2	1/100	Green	0.5 mL	No	PS	Yes	Yes	25	1000
606107	5	1/10	Blue	2.5 mL	Yes	PS	Yes	Yes	25	500
607107	10	1/10	Orange	3.0 mL	Yes	PS	Yes	Yes	25	500
760107	25	1/2	Red	10.0 mL	Yes	PS	Yes	Yes	25	200



Serological Pipettes Shorties and special models

- 4½” shorter than the standard length Pipettes
- Ideal for working under bench top hoods and significantly reducing hand/wrist fatigue
- Plastic/plastic packaging permits peel-off function that provides user-friendly easy opening and aseptic pipette removal, reduced contamination risk and particulate-free opening
- Full colored mouthpiece, reverse (ascending and descending) graduations and negative graduations
- Cotton plugged and color-coded according to international convention
- Lot number and best before date on each individual wrap

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Volume (mL)	Graduations (mL)	Color Code	Negative Graduations	Ascending / Descending Graduations	Anti-Drip Tip	Material	Sterile	Individually Packaged	Pack Qty	Case Qty
606190	5	1/10	Blue	3.0 mL	Yes	No	PS	Yes	Yes	50	200
607190	10	2/10	Orange	10.0 mL	Yes	Yes	PS	Yes	Yes	50	200

Aspiration Pipette

710183	2	N/A	N/A	(aspiration)	No	Yes	PS	Yes	Yes	1	1000
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EASYstrainer™ Cell Strainers

For Filtration of Cell Suspensions and Primary Cell Isolates

- Three color-coded mesh sizes
- Fits all standard 50 mL tubes
- Handle and mantle surface for improved aseptic handling
- Venting slot for fast filtration
- No liquid overspill
- Convenient blister pack

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Description	Sterile	Color	Bag Qty	Case Qty
542040	EASYstrainer for 50 mL tubes, 40 µm mesh size	Yes	Green	1	50
542070	EASYstrainer for 50 mL tubes, 70 µm mesh size	Yes	Blue	1	50
542000	EASYstrainer for 50 mL tubes, 100 µm mesh size	Yes	Yellow	1	50



Centrifuge Tubes

Polystyrene and Polypropylene

- 15 and 50 mL volumes in polystyrene, conical bottom format
- 15 and 50 mL volumes in polypropylene, conical and conical/skirted bottom formats
- Excellent optical clarity and mechanical, thermal and chemical stability for polypropylene tubes
- Unsurpassed optical clarity for polystyrene tubes
- Graduation markings with ID field on the side
- Available packaged in bulk bags or racked

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Volume (mL)	Material	Bottom Style	Skirted	Closure Type	Cap Color	Sterile	Racked	Rack Qty	Pack Qty
188161	15	PS	Conical	No	Screw	Blue	Yes	Yes	50/Rack	500
188171	15	PS	Conical	No	Screw	Blue	Yes	No	100	1000
188261	15	PP	Conical	No	Screw	Blue	Yes	Yes	50/Rack	500
188271	15	PP	Conical	No	Screw	Blue	Yes	No	100	1000
210261	50	PP	Conical	Yes	Screw	Blue	Yes	No	25	450
210270	50	PP	Conical	Yes	Screw	Blue	Yes	Yes	25/Rack	300
227261	50	PP	Conical	No	Screw	Blue	Yes	No	20	500
227270	50	PP	Conical	No	Screw	Blue	Yes	Yes	25/Rack	300

See page 52 for compatible small laboratory equipment.



Light Protection Tubes

Polypropylene

- 15 and 50 mL volumes, conical bottom formats
- Amber colored light protection tubes for light-sensitive materials and reactions
- Excellent mechanical, thermal and chemical stability
- Graduation markings with ID field on the side
- Available packaged in bulk bags or racked

Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

GBO Cat. No.	Volume (mL)	Material	Bottom Style	Skirted	Closure Type	Cap Color	Sterile	Racked	Pack Qty	Case Qty
188280	15	PP	Conical	No	Screw	Blue	Yes	No	100	1000
188283	15	PP	Conical	No	Screw	Blue	Yes	Yes	50/Rack	500
227280	50	PP	Conical	No	Screw	Blue	Yes	No	20	500
227283	50	PP	Conical	No	Screw	Blue	Yes	Yes	25/Rack	300



CELLSTAR® CELLreactor™ 15 mL and 50 mL Polypropylene Filter Top Tube

- Ideal for suspension and spheroid culture
- Facilitates a high number of parallel experiments
- Flexible working volume
- Maximal sterility and excellent gas exchange
- Conical tube design and in-tube cell harvest
- Graduation markings with ID field on the side

Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

The new CELLSTAR® CELLreactor™ can be used as a small bioreactor for suspension and spheroid cell culture, facilitating miniaturization of large scale setups and maximizing the number of parallel experiments.

Each CELLreactor™ cap features 8 holes and a specific USP VI certificated, PTFE coated capillary pore filter membrane with a pore size of 0.2 µm to guarantee maximal sterility while providing excellent gas exchange. In case the aeration has to be reduced, individual openings can be sealed. Agitation of internal liquids is achieved with standard shaking lab equipment minimizing foam formation and cellular

shear stress induced by integrated mixing devices. Compared to cell culture and spinner flask as well as other cultivation disposables no transfer for cell harvest is required. Based on the conical design the tube fits in standard 50 mL centrifuge rotors and cells can be spun down in the tube they have been cultivated in.

In addition to cell culture applications, the CELLSTAR® CELLreactor™ can be applied to the expansion of aerobic bacteria, yeast or other microorganisms in shaken cultures* as well as storage of components and liquids requiring gas exchange.

* For anaerobic culture the CELLSTAR® polypropylene tube with standard cap (GBO Cat. No. 188271 / 15 mL or 227261 / 50 mL) can be used.

GBO Cat. No.	Volume (mL)	Material	Bottom Style	Skirted	Closure Type	Cap Color	Sterile	Racked	Pack Qty	Case Qty
188240	15	PP	Conical	No	Screw	Blue	Yes	Yes	20/Rack	300
227245	50	PP	Conical	No	Screw	Blue	Yes	Yes	20/Rack	500



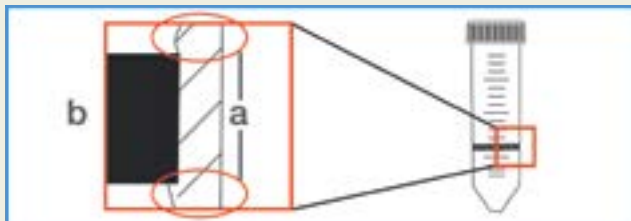
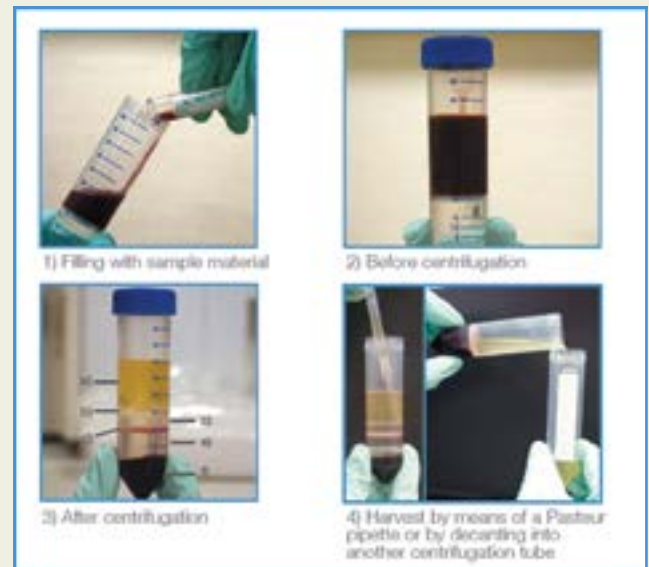
12 mL and 50 mL Leucosep™ Tubes

Efficient separation of lymphocytes and mononuclear cells from peripheral blood and bone marrow

- Enrichment directly from whole blood
- Simplified filling through porous barrier
- Rapid separation in 15 minutes at room temperature
- No additional laboratory equipment required
- Removal of erythrocytes and granulocytes
- No recontamination with erythrocytes
- No blocking of marker molecules
- Pre-filled option
- Also available unfilled

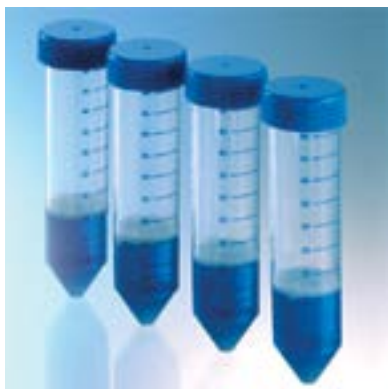
Leucosep™ was developed for optimal separation of lymphocytes and peripheral mononuclear cells (so-called PBMCs) from human whole blood and bone marrow. (The key feature of Leucosep™ is the porous barrier incorporated into the centrifuge tube made of highly translucent polypropylene.) This barrier consists of high-grade polyethylene. It shows a precisely controlled pore size and does away with the time-consuming and laborious overlaying of the sample material. Anticoagulated blood or bone marrow can simply be poured directly from the blood sampling tube into the Leucosep™ tube. The porous barrier prevents mixture of the sample material with the separation medium. During centrifugation, lymphocytes and PBMCs are separated from unwanted erythrocytes and granulocytes on the basis of their density and enriched in an interphase above the separation medium. When separation is complete, the barrier prevents recontamination of the enriched cell fraction during harvest.

Regardless of whether large or small sample volumes are to be processed, Greiner Bio-One has exactly the right Leucosep™ tube for the application in question. Information on and instructions for using Leucosep™ can be obtained from your Account Manager.



50 mL Leucosep™ tubes have **retaining rings (a)** that stabilize the position of the porous barrier **(b)** for even better robustness and user-friendliness, e.g. during centrifugation.

GBO Cat. No.	Description	Bag/Case Qty
163288	Leucosep Tube, 12 mL, w/porous barrier at 3 mL graduation, PP, round bottom, aseptic, pre-filled w/1.077 g/mL separation medium	50/500
163290	Leucosep Tube, 12 mL, w/porous barrier at 3 mL graduation, PP, round bottom, sterile, unfilled	50/500
163290P	Leucosep Tube, 12 mL, w/porous barrier at 3 mL graduation, PP, round bottom, sterile, unfilled	50/50
227288	Leucosep Tube, 50 mL w/porous barrier at 15 mL graduation, PP, conical bottom, aseptic, pre-filled w/1.077 g/mL density gradient media	25/250
227290	Leucosep Tube, 50 mL w/porous barrier at 15 mL graduation, PP, conical bottom, sterile, unfilled	25/300
227290P	Leucosep Tube, 50 mL w/porous barrier at 15 mL graduation, PP, conical bottom, sterile, unfilled	25/25



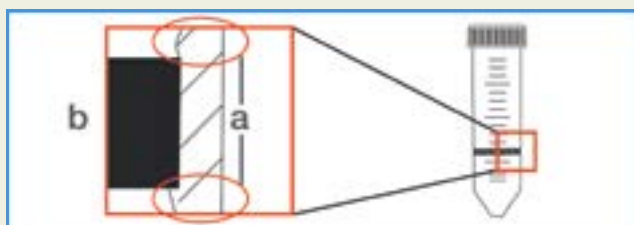
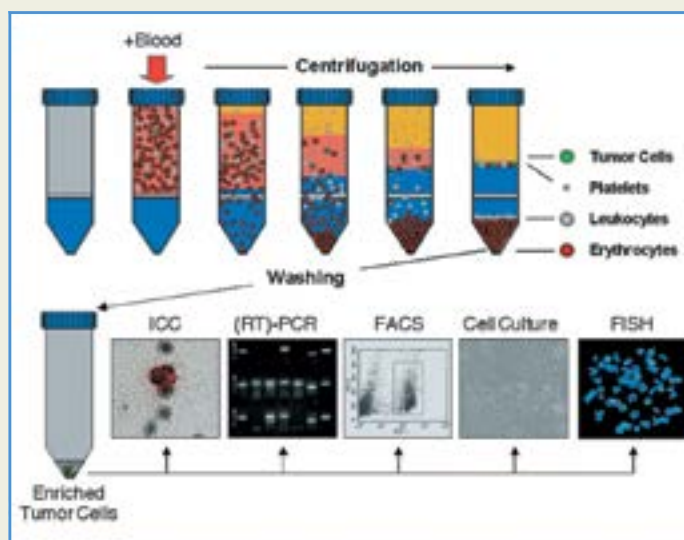
OncoQuick® Tubes

Enrichment of disseminated, circulating tumor cells from peripheral blood

- Time request: approximately 45 minutes
- Reproducible recovery: > 70 %
- Depletion of blood cells by up to 6 log units
- No additional laboratory equipment required
- No magnetic beads needed
- No blocking of marker molecules
- Enrichment directly from whole blood

OncoQuick® is a simple-to-use, rapid and efficient system for the enrichment of circulating tumor cells that are released into the blood by a solid epithelial tumor or malignant melanoma. OncoQuick® combines the advantages of cell separation by density gradient centrifugation (rapid, reproducible and cost-effective) with recovery rates that are comparable with immunobead methods.

OncoQuick® consists of a sterile 50 mL polypropylene tube with a porous barrier which is inserted above the specially developed separation medium. Up to 30 mL of anticoagulated whole blood is directly filled into the OncoQuick® tube and centrifuged. Apart from erythrocytes and granulocytes, the separation medium also allows the elimination of lymphocytes and mononuclear cells to a wide extent. The disseminated tumor cells are enriched in the interphase. After harvesting, the enriched cell fraction is washed. The tumor cells are then available for all standard research methods. OncoQuick® was developed in a cooperation between Hexal Gentech and Greiner Bio-One and is intended for use for research purposes only! Information on and instructions for using OncoQuick® can be obtained from your Account Manager.



OncoQuick® tubes have retaining rings (a) that stabilize the position of the porous barrier (b) for even better robustness and user-friendliness, e.g. during centrifugation.



GBO Cat. No.	Description	Bag/Case Qty
227250	OncoQuick tubes with porous barrier and separation medium, 15-30 mL blood sample volume, sterile	10
227255	OncoQuick tubes with porous barrier and separation medium, 15-30 mL blood sample volume, sterile	4



Culture Tubes

Tissue Culture Treated, Polystyrene
Suspension Culture, Polystyrene and Polypropylene

- TC Treated and Suspension Culture formats
- Choice of screw closure or ventilation closure
- Polypropylene tubes with graduation markings
- Highly transparent polystyrene and polypropylene
- Extensive range of tube sizes and volumes
- Bayonet cap offers screw cap with fewer turns

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	TC Treated	Volume (mL)	Material	Bottom Style	Closure Type	Vented Cap	Graduated	Sterile	Diameter (mm)	Height (mm)	Pack Qty	Case Qty
120160	Yes	4.5	PS	Round	Snap	Yes	No	Yes	12.4	75	1	1000
120190	Yes	4.5	PS	Round	Snap	Yes	No	Yes	12.4	75	25	2000
163160	Yes	12	PS	Round	Red, Screw	No	No	Yes	16	100	5	1000
164160	Yes	12	PS	Conical, Skirted	Red, Bayonet	No	No	Yes	16.8	100	5	1000
191160	Yes	14	PS	Round	Snap	Yes	No	Yes	18	95	1	750
120161	No	4.5	PS	Round	Snap	Yes	No	Yes	12.4	75	1	1000
120180	No	4.5	PS	Round	Snap	Yes	No	Yes	12.4	75	25	2000
163161	No	12	PS	Round	Black, Screw	No	No	Yes	16	100	900	900
164161	No	12	PS	Conical, Skirted	Blue, Bayonet	No	No	Yes	16.8	100	25	1000
191161	No	14	PS	Round	Snap	Yes	No	Yes	18	95	1	750
191180	No	14	PS	Round	Snap	Yes	No	Yes	18	95	25	1000
115101	No	5	PS	Round	303321	No	No	No	12	75	250	2000
115261	No	5	PP	Round	Snap	Yes	Yes	Yes	12	75	1	1000
115262	No	5	PP	Round	Snap	Yes	Yes	Yes	12	75	25	2000
184261	No	12	PP	Round	Snap	Yes	Yes	Yes	17	77	1	1000
187261	No	14	PP	Round	Snap	Yes	No	Yes	18	95	1	800
187262	No	14	PP	Round	Snap	Yes	No	Yes	18	95	25	1000



Microcentrifuge Tubes

Polypropylene

- Manufactured from highly transparent, inert polypropylene
- High RCF ratings
- Graduation markings for easier volume reading
- High chemical and temperature resistance

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Volume (mL)	Material	Compatibility Style	Maximum RCF x g	Autoclavable	Tube Color	Graduated	Sterile	Pack Qty	Case Qty
667201	0.5	PP	Viatron	18,000	Yes	Clear	No	No	1000	10,000
616201	1.5	PP	Eppendorf	18,000	Yes	Clear	Yes	No	500	4000
616273	1.5	PP	Eppendorf	18,000	Yes	Red	Yes	No	500	4000
616274	1.5	PP	Eppendorf	18,000	Yes	Blue	Yes	No	500	4000
616275	1.5	PP	Eppendorf	18,000	Yes	Green	Yes	No	500	4000
616276	1.5	PP	Eppendorf	18,000	Yes	Yellow	Yes	No	500	4000
616281	1.5	PP	Eppendorf	18,000	Yes	Assorted	Yes	No	500	4000
616283	1.5	PP	Eppendorf	18,000	Yes	Brown	Yes	No	500	4000
623201	2.2	PP	Eppendorf	18,000	Yes	Clear	No	No	500	4000



Media Bottles

PET (Polyethylene Terephthalate)

- 100, 500 and 1000 mL volumes
- Durable and flexible PET resistant to cracking
- Square design allows efficient use of storage space
- Clear PET and graduation markings allow easy inspection and volume reading of bottle contents
- Pre-sterilized bottles are ideal for storage of media, buffers, sera and much more
- Sterile

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Working Volume (mL)	Maximum Volume (mL)	Sterile	Closure	Special Features	Pack Qty	Case Qty
951700P	100	125	Yes	White Screw Cap	Graduations to 100 mL	25	25
951700	100	125	Yes	White Screw Cap	Graduations to 100 mL	25	100
950700	500	650	Yes	White Screw Cap	Graduations to 500 mL	25	50
952700	1000	1150	Yes	White Screw Cap	Graduations to 1000 mL	12	24



Cell Scrapers

- 25 and 40 cm handle length
- 16 mm blade length
- Ideal for mechanical harvesting of cells in place of chemical treatment methods
- Pivoted scraper blade design minimizes cell damage and ensures even contact with the growth surface
- Sterile, individually wrapped

GBO Cat. No.	Description	Handle Length (cm)	Scraper Width (mm)	Sterile	Special Features	Pack Qty	Case Qty
541070	Cell Scraper	28	18	Yes	Pivot Head	1	100
541080	Cell Scraper	40	18	Yes	Pivot Head	1	100



CELLMASTER™ Roller Bottles PET (Polyethylene Terephthalate)

- 850 cm² growth surface (2500 mL maximum volume)
- Ideal for monoclonal antibody and viral production
- Surface suitable for many adherent cell lines
- PET is extremely stable and gas permeable for uniform growth and proliferation characteristics
- All PET Roller Bottles have a standard screw cap

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Growth Area (cm ²)	Bottle Material	Volume (mL)	Sterile	Graduated To	ID Field	Dimensions H x W (mm)	Pack Qty	Case Qty
680160	850	PET	2500	Yes	1000 mL	Yes	116 x 276	1	18
680170	850	PET	2500	Yes	1000 mL	Yes	116 x 276	30	30
680180	850	PET	2500	Yes	2000 mL	Yes	116 x 276	1	18



CELLMASTER™ Roller Bottles PS (Polystyrene)

- Available in 850 cm² growth surface (2520 mL maximum volume) and 1700 cm² growth surface (4970 mL maximum volume)
- Particularly high stability and optical clarity
- Improved cell adhesion through physical surface (TC) treatment
- Thread enables quick opening with a 2/3 turn
- Larger knurls on screw cap provide improved grip for ease of opening/closing
- Lot number and best before date on each roller bottle

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Growth Area (cm ²)	Bottle Material	Volume (mL)	Filter (Vent) Cap	Sterile	Graduated Scale	ID Field	Dimensions H x W (mm)	Pack Qty	Case Qty
680060	850	PS	2520	No	Yes	100-2000 mL	Yes	271 x 122	2	24
680065	850	PS	2520	No	Yes	100-2000 mL	Yes	271 x 122	24	24
680048	850	PS	2520	No	Yes	100-2000 mL	Yes	271 x 122	24	48
680058	850	PS	2520	Yes	Yes	100-2000 mL	Yes	271 x 122	2	24
680068	850	PS	2520	Yes	Yes	100-2000 mL	Yes	271 x 122	24	24
680045	850	PS	2520	Yes	Yes	100-2000 mL	Yes	271 x 122	24	48
681048	1700	PS	2280	No	Yes	100-1000 mL	Yes	271 x 122	24	48
681060	1700	PS	2280	No	Yes	100-1000 mL	Yes	271 x 122	2	24
681062	1700	PS	2280	Yes	Yes	100-1000 mL	Yes	271 x 122	2	24
681065	1700	PS	2280	No	Yes	100-1000 mL	Yes	271 x 122	24	24
681075*	2125	PS	2300	No	Yes	100-1000 mL	Yes	271 x 122	24	24
682060	1700	PS	4970	No	Yes	100-2000 mL	Yes	500 x 122	1	12
682012	1700	PS	4970	No	Yes	100-2000 mL	Yes	500 x 122	12	12
682024	1700	PS	4970	No	Yes	100-2000 mL	Yes	500 x 122	12	24
682065	1700	PS	4970	Yes	Yes	100-2000 mL	Yes	500 x 122	1	12
682015	1700	PS	4970	Yes	Yes	100-2000 mL	Yes	500 x 122	12	12
682025	1700	PS	4970	Yes	Yes	100-2000 mL	Yes	500 x 122	12	24

*short form, ribbed surface



CELLdisc™

Simplify your scale up and mass cell culture

- Minimum space required for handling of device
- 40% higher surface/volume ratio than conventional multilayer systems
- Surface treatment for optimal cell attachment
- Optimal ventilation through central gas support channel

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

CELLdisc™ is a new multilayer device covering a range of cell culture surfaces from 1,000 cm² up to 10,000 cm². The innovative ergonomic design provides a versatile system from research scale to industrial batches. In addition, a centrally located channel allows uniform distribution of gas throughout the device. A socle-rim guarantees that the bottom layer of the CELLdisc™ does not touch the surface of the incubator. The compact and robust cylindrical device is ideally suited for automation and upscaling of mass cell culture. For the connection of the individual layers a proprietary, particle free assembly technique is used and the complete end product is USP Class VI certified. Additionally, CELLdisc™ is guaranteed to be sterile (SAL 10⁻⁶), non-pyrogenic, non-cytotoxic and free of detectable DNase, RNase and human DNA.

Step 1: Fill cell suspension into CELLdisc™

Step 2: Close CELLdisc™ with the screw cap firmly, then tilt device 90° with screw cap/channel at lowest possible position

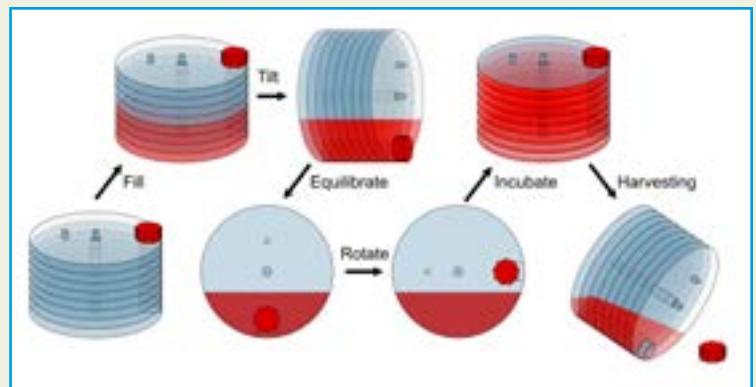
Step 3: Wait (5-10 seconds) until liquid is equally distributed

Step 4: Rotate CELLdisc™ by further 90°

Step 5: Raise CELLdisc™ up right from this position

Step 6: Tilt CELLdisc™ slightly and transport carefully

Step 7: Place CELLdisc™ on a horizontal surface into an incubator



GBO Cat. No.	Growth Area (cm ²)	TC Treated	Sterile	No. of Layers	Closure Color	Pack Qty	Case Qty
678104	1,000 cm ²	Yes	Yes	4	Red	1	4
678108	2,000 cm ²	Yes	Yes	8	Red	1	3
678116	4,000 cm ²	Yes	Yes	16	Red	1	2
678140	10,000 cm ²	Yes	Yes	40	Red	1	1
678904	1,000 cm ²	Yes	Yes	4	Blue	1	4
678908	2,000 cm ²	Yes	Yes	8	Blue	1	3
678916	4,000 cm ²	Yes	Yes	16	Blue	1	2
678940	10,000 cm ²	Yes	Yes	40	Blue	1	1



CELLSTAR® Flasks, Tissue Culture Polystyrene

- 25, 75 and 175 cm² formats; Lo-Profile and Hi-Profile design of 175 cm² format for variability of the media volume
- Design of all flask formats allows efficient access to the cell lawn with cell scrapers and optimal access with pipettes
- Improved cell adhesion through physical surface treatment
- Plug seal and 0.2 µm vented filter cap options (red caps for adherent cell culture flasks)
- Canted neck and graduations on the side
- Lot number and best before date on each flask

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Growth Area (cm ²)	Total Volume (mL)	TC Treated	Sterile	Closure Type	Closure Color	Neck Style	Special Features	Pack Qty	Case Qty
690160	25	50	Yes	Yes	Plug	Red	Canted	–	10	200
690170	25	50	Yes	Yes	Plug	Red	Canted	Measuring Grid	10	200
690175	25	50	Yes	Yes	Filter	Red	Canted	–	10	200
658170	75	250	Yes	Yes	Plug	Red	Canted	–	5	120
658175	75	250	Yes	Yes	Filter	Red	Canted	–	5	120
660160	175	550	Yes	Yes	Plug	Red	Canted	Lo-Profile	5	50
660175	175	550	Yes	Yes	Filter	Red	Canted	Lo-Profile	5	50
661160	175	650	Yes	Yes	Plug	Red	Canted	Hi-Profile	4	40
661175	175	650	Yes	Yes	Filter	Red	Canted	Hi-Profile	4	40



CELLSTAR® Flasks, Suspension Culture Polystyrene

- 50, 250, 550 (Lo-Profile) and 650 mL (Hi-Profile) formats
- Design of all flask formats allows optimal access with pipettes
- Plug seal and 0.2 µm vented filter cap options (white caps for suspension culture flasks)
- Canted neck and graduations on the side
- Lot number and best before date on each flask

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Growth Area (cm ²)	Total Volume (mL)	TC Treated	Sterile	Closure Type	Closure Color	Neck Style	Special Features	Pack Qty	Case Qty
690190	NA	50	No	Yes	Plug	White	Canted	–	10	200
690195	NA	50	No	Yes	Filter	White	Canted	–	10	200
658190	NA	250	No	Yes	Plug	White	Canted	–	5	120
658195	NA	250	No	Yes	Filter	White	Canted	–	5	120
660190	NA	550	No	Yes	Plug	White	Canted	Lo-Profile	5	50
661190	NA	650	No	Yes	Plug	White	Canted	Hi-Profile	4	40
661195	NA	650	No	Yes	Filter	White	Canted	Hi-Profile	4	40



CELLSTAR® Dishes, Tissue Culture Polystyrene

- 35, 60, 94, 100 and 145 mm formats
- Improved cell adhesion through physical surface (TC) treatment
- Hydrophobic surfaces (non-treated) for suspension and hybridoma cultures
- High transparency and low autofluorescence for excellent analysis by microscopy
- Vented versions offer uniform gas exchange and reduced condensation
- Stacking rims for simple storage and ease of handling

Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

GBO Cat. No.	Growth Area (cm ²)	Dimensions W x H (mm)	TC Treated	Sterile	Vented	Pack Qty	Case Qty
627160	8.7	35 x 10	Yes	Yes	Yes	10	740
628160	21	60 x 15	Yes	Yes	Yes	10	600
664160	58	100 x 20	Yes	Yes	Yes	15	360
639160	145	145 x 20	Yes	Yes	Yes	5	120



CELLview™ Cell Culture Dish with Glass Bottom for Microscopic Applications

- High transparency achromatic borosilicate glass; hydrolytic class 1 (DIN-ISO 719)
- Maximal spectral transmission; no autofluorescence; no depolarization of light
- Available with specific surface treatments increasing the attachment of adherent cells
- Broad range of multiple microscopic applications

Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

GBO Cat. No.	Growth Area (cm ²)	Width (mm)	Glass Thickness	Working Volume	Number of Compartments	Surface Treatment	Pack Qty	Case Qty
627861	8.7	35	175 µm	5.0 mL	1	None	10	40
627860	8.7	35	175 µm	5.0 mL	1	TC Treated	10	40
627965	8.7	35	175 µm	5.0 mL	1	Advanced TC™	10	40
627871	2.2	35	175 µm	0.1-0.5 mL	4	None	10	40
627870	2.2	35	175 µm	0.1-0.5 mL	4	TC Treated	10	40
627975	2.2	35	175 µm	0.1-0.5 mL	4	Advanced TC™	10	40

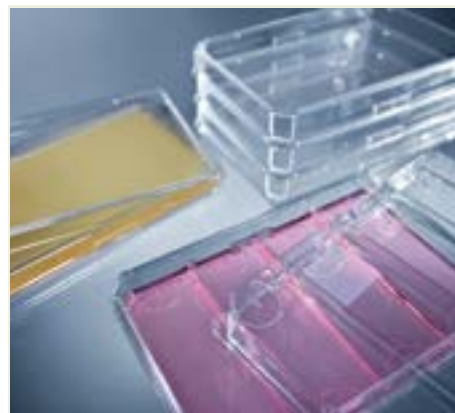


CELLview™ Slide

- 10 wells with alphanumeric coding
- Positioning notch for automated microscopy
- Detachable black upper housing
- Reduced meniscus effect due to round well design
- Well distance is equal to a 96 well microplate
- Highly transparent achromatic borosilicate glass, hydrolytic class 1
- Glass thickness: 175 µm +/- 15 µm

non-cytotoxic

GBO Cat. No.	Bottom	Growth Area (mm ²)	LxWxH (mm)	Sterile	Total Volume (µl)	Number of Wells	Surface Treatment	Pack Qty	Case Qty
543079	Glass	32/well	75 x 25 x 12.6	Yes	447/well	10	TC Treated	5	45
543979	Glass	32/well	75 x 25 x 12.6	Yes	447/well	10	Advanced TC™	5	45



CELLSTAR® OneWell and FourWell Plates™, Tissue Culture

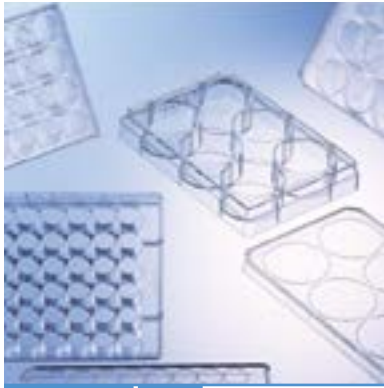
- OneWell Plate™ ideal for large quantities of cells and multipurpose applications
- FourWell Plate™ ideal for the cultivation of cells and the storage of microscopic slides
- Conform to ANSI recommendations, compatible with instruments for automation
- Available with TC treatment for adherent culture or no TC treatment for suspension culture

Free of detectable DNase, RNase, human DNA, non-pyrogenic

non-cytotoxic

GBO Cat. No.	Growth Area (cm ²)	No. of Chambers	Total Volume (mL)	Lid	Sterile	TC Surface Treatment	Pack Qty	Case Qty
670180	95	1	113.7	Yes	Yes	Yes	8	32
670190	95	1	113.7	Yes	Yes	No	8	32
96077307	-	4	18.6/well	Yes	Yes	Yes	8	32

CELLSTAR® OneWell Plate™ (non-sterile) for bacteriological applications located on page 51.



Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

CELLSTAR® Multiwell Plates, Tissue Culture Polystyrene

- 6, 12, 24 and 48 well formats
- Improved cell adhesion through physical surface (TC) treatment
- High transparency and low autofluorescence for excellent analysis by microscopy
- Condensation ring lids enable optimal gas exchange with the lowest possible evaporation
- Single position lids prevent cross-contamination
- Conform to ANSI recommendations, compatible with cell culture inserts and instruments for automation
- Available with hydrophobic surfaces (sterile, non TC-treated) for suspension and hybridoma cultures

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Growth Area (cm ²)	Well Density	TC Treated	Sterile	Color	Chimney Style	With Lid	Pack Qty	Case Qty
657160	9.6	6 well	Yes	Yes	Clear	Yes	Yes	1	100
657165	9.6	6 well	Yes	Yes	Clear	Yes	Yes	5	120
665180	3.9	12 well	Yes	Yes	Clear	Yes	Yes	1	100
665165	3.9	12 well	Yes	Yes	Clear	Yes	Yes	5	120
662160	1.9	24 well	Yes	Yes	Clear	Yes	Yes	1	100
662165	1.9	24 well	Yes	Yes	Clear	Yes	Yes	5	120
677180	1.0	48 well	Yes	Yes	Clear	Yes	Yes	1	100
677165	1.0	48 well	Yes	Yes	Clear	Yes	Yes	5	120



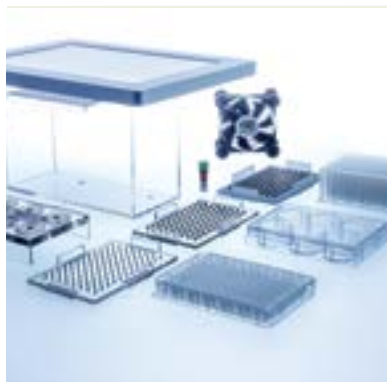
Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

ThinCert™ Tissue Culture Inserts

- Important research tool for transport, co-culture, migration and invasion studies
- Improved cell adhesion through physical surface (TC) treatment
- Stable clear polystyrene housing with sealed PET capillary pore membrane
- Hanging geometry provides protection to lower compartment cell layer
- Eccentric in-well positioning allows unequalled access to lower compartment; eliminates insert handling concerns for microscopic viewing, sampling and feeding of lower compartment cell layer
- Simplified pipetting due to self-lift geometry
- Single, sterile blister packing

GBO Cat. No.	Size	Membrane Material	Pore Size (µm)	Pore Density (cm ²)	Optical Properties	Pack Qty	Case Qty
657640	6 well	PET	0.4	1 x 10 ⁸	Transparent	1	24
657641	6 well	PET	0.4	2 x 10 ⁸	Transparent	1	24
657610	6 well	PET	1	2 x 10 ⁸	Transparent	1	24
657630	6 well	PET	3	0.6 x 10 ⁶	Transparent	1	24
657631	6 well	PET	3	2 x 10 ⁶	Transparent	1	24
657638	6 well	PET	8	0.15 x 10 ⁶	Transparent	1	24
665640	12 well	PET	0.4	1 x 10 ⁸	Transparent	1	48
665641	12 well	PET	0.4	2 x 10 ⁸	Transparent	1	48
665610	12 well	PET	1	2 x 10 ⁸	Transparent	1	48
665630	12 well	PET	3	0.6 x 10 ⁶	Transparent	1	48
665631	12 well	PET	3	2 x 10 ⁶	Transparent	1	48
665638	12 well	PET	8	0.15 x 10 ⁶	Transparent	1	48
662640	24 well	PET	0.4	1 x 10 ⁸	Transparent	1	48
662641	24 well	PET	0.4	2 x 10 ⁸	Transparent	1	48
662610	24 well	PET	1	2 x 10 ⁸	Transparent	1	48
662630	24 well	PET	3	0.6 x 10 ⁶	Transparent	1	48
662631	24 well	PET	3	2 x 10 ⁶	Transparent	1	48
662638	24 well	PET	8	0.15 x 10 ⁶	Transparent	1	48
657654	6 well	PET Col 1 coated	0.4	1 x 10 ⁸	Translucent	1	6 pieces in one 6 well plate
662654-06	24 well	PET Col 1 coated	0.4	1 x 10 ⁸	Translucent	1	6 pieces in one 24 well plate
662654	24 well	PET Col 1 coated	0.4	1 x 10 ⁸	Translucent	1	24 pieces in one 24 well plate



Magnetic 3D Cell Culturing

The core technology of our partner Nano3D Biosciences (n3D) is the magnetization of cells with NanoShuttle™-PL. The cells can be aggregated with magnetic forces, either by levitation or printing, to form structurally and biologically representative 3D models in vitro.

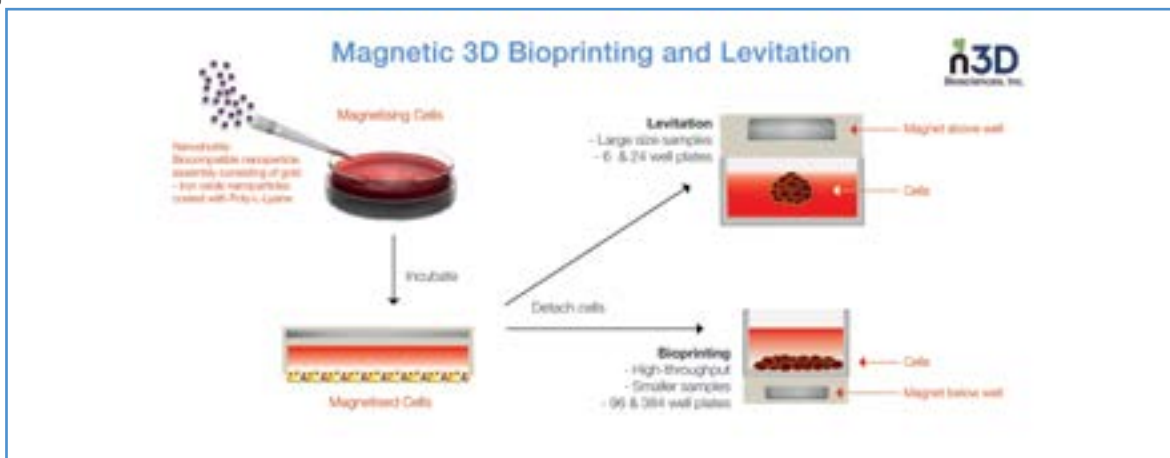
- Mimicking native tissue environment
- Rapid 3D model formation within hours
- No specialized media
- Easy to handle/ no sample loss
- Allows co-culture



GBO Cat. No.	Description	Pieces/Bag	Pieces/Box
627830	Single Well Drives Levitating Drive, Concentrating Drive	1	1
657840	6 well Bio-Assembler Kit	1	1
657830	6 well Drive Levitating Drive, Concentrating Drive	1	1
662840	24 well Bio-Assembler™ Kit	1	1
662830	24 well Drive Levitating Drive, Concentrating Drive	1	1
662824	24 well Custom Lid, 3D Printed Special Lid	1	1
655840	96 well Bioprinting Kit, Clear Plates	1	1
655841	96 well Bioprinting Kit, Black µClear Plates	1	1
655846	96 well BIO Assay™ Kit	1	1
655849	96 well BIO Assay™ Kit & n3Dock Imaging Kit	1	1
655830	96 well Drives, Spheroid and Holding	1	1
781840	384 well Bioprinting Kit, Clear Plates	1	1
781841	384 well Bioprinting Kit, Black µClear Plates	1	1
781846	384 well BIO Assay™ Kit	1	1
781849	384 well BIO Assay™ Kit & n3Dock Imaging Kit	1	1
781830	384 well Drives, Spheroid and Holding	1	1
657841	NanoShuttle™-PL Refill, 600 µL Vial (1)	1	1
657843	NanoShuttle™-PL Refill 3 Pack, 600 µL Vials (3)	1	1
657846	NanoShuttle™-PL Refill 6 Pack, 600 µL Vials (6)	3	3
657847	NanoShuttle™-PL Refill 6 Pack with FREE iPod™ (Only with purchase of BIO Assay™ 655849 or 781849)	6	6
657850	MagPen™ 3 Pack	1	1
657860	n3Dock Imaging Kit	1	1
657810	Battery Power for the n3Dock Imaging Kit	1	1

With magnetized spheroids, solution addition and removal is made easy by using magnetic force to hold them in a stationary position during aspiration, thereby limiting spheroid loss. Spheroids can also be picked up and transferred between vessels using magnetic tools such as the MagPen™.⁴

NanoShuttle™-PL consists of gold, iron oxide, and poly-L-lysine.⁵ NanoShuttle™-PL magnetizes cells by electrostatically attaching to cell membranes during an overnight static incubation. Magnetized cells will appear peppered with dark nanoparticles after incubation. NanoShuttle™-PL will stay attached to the cell membrane for up to 8 days, at which point it's released into the 3D culture.⁵ NanoShuttle™-PL is biocompatible, having no effect on metabolism, proliferation, and inflammatory stress⁶⁻⁷, and even encouraging proliferation in 3D.^{5,8} Additionally, it does not interfere with experimental techniques, such as fluorescence⁹, or Western blotting.¹⁰



4) Tseng, H. et al. Assembly of a three-dimensional multitype bronchiole coculture model using magnetic levitation. *Tissue Eng. Part C. Methods* 19, 665–75 (2013).
 5) Souza, G. R. et al. Three-dimensional tissue culture based on magnetic cell levitation. *Nat. Nanotechnol.* 5, 291–6 (2010).
 6) Tseng, H. et al. Assembly of a three-dimensional multitype bronchiole coculture model using magnetic levitation. *Tissue Eng. Part C. Methods* 19, 665–75 (2013).
 7) Tseng, H. et al. A three-dimensional co-culture model of the aortic valve using magnetic levitation. *Acta Biomater.* 10, 173–82 (2014).
 8) Castro-Chavez, F., Vickers, K. C., Lee, J. S., Tung, C.-H. & Morrisett, J. D. Effect of lyso-phosphatidylcholine and Schnurri-3 on osteogenic transdifferentiation of vascular smooth muscle cells to calcifying vascular cells in 3D culture. *Biochim. Biophys. Acta* 1830, 3828–34 (2013).
 9) Daquinag, A. C., Souza, G. R. & Kolonin, M. G. Adipose tissue engineering in three-dimensional levitation tissue culture system based on magnetic nanoparticles. *Tissue Eng. Part C. Methods* 19, 336–44 (2013).
 10) Molina, J. R., Hayashi, Y., Stephens, C. & Georgescu, M.-M. Invasive glioblastoma cells acquire stemness and increased Akt activation. *Neoplasia* 12, 453–63 (2010).



CELLSTAR® Cell-Repellent Surface

Cell culture vessels for suspension and spheroid culture

Greiner Bio-One introduces a new surface chemistry to effectively inhibit cell adhesion. Characterized by low cell attachment, the cell-repellent surface is ideal for applications such as:

- Spheroid culture of tumor cells
- Spheroid culture of embryonic cells
- Embryoid body formation
- Suspension culture of semi-adherent and adherent cell lines (e.g. for suspension culture of macrophages)

Achieved through an innovative chemical polymer modification, Greiner Bio-One's cell-repellent surface does not degrade or leach under common cell culture conditions, rendering an ideal substrate for native cell culture experiments.

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

FEATURES

- Effectively inhibits cell adhesion
- 4 years shelf life
- Sterile
- Other formats available on request

GBO Cat. No.	Description	Pieces/Bag	Pieces/Box
	Cell Culture Dish		
627979	Cell Culture Dish, Ø 35 x 10 mm, PS, cell-repellent surface, clear, sterile, with lid	10	40
628979	Cell Culture Dish, Ø 60 x 15 mm, PS, cell-repellent surface, clear, sterile, with lid	10	20
664970	Cell Culture Dish, Ø 100 x 20 mm, PS, cell-repellent surface, clear, sterile	1	5
	Cell Culture Flask		
690980	Cell Culture Flask, 50 mL, PS, cell-repellent surface, sterile, white screw cap	10	20
658980	Cell Culture Flask, 250 mL, PS, cell-repellent surface, sterile, white screw cap	5	15
660980	Cell Culture Flask, 550 mL, PS, cell-repellent surface, sterile, standard screw cap	5	5
661980	Cell Culture Flask, 650 mL, PS, cell-repellent surface, sterile, white screw cap	4	4
	Filter Cap Cell Culture Flask		
658985	Filter Cap Cell Culture Flask, 250 mL, PS, cell-repellent surface, sterile	5	15
660985	Filter Cap Cell Culture Flask, 550 mL, PS cell-repellent surface, sterile	5	5
661985	Filter Cap Cell Culture Flask, 650 mL, PS, cell-repellent surface, sterile	4	4
	Multiwell Plate		
657970	6 well Multiwell Plate, PS, cell-repellent surface, clear, sterile, with lid	1	5
662970	24 well Multiwell Plate, PS, cell-repellent surface, clear, sterile, with lid	1	5
677970	48 well Multiwell Plate, PS, cell-repellent surface, clear, sterile, with lid	1	5
	Microplate		
650970	96 well Microplate, PS, U-bottom, cell-repellent surface, clear, sterile, with lid	1	6
650979	96 well Microplate, PS, U-bottom, cell-repellent surface, clear, sterile, with lid	8	32
651970	96 well Microplate, PS, V-bottom, cell-repellent surface, clear, sterile, with lid	1	6
655970	96 well Microplate, PS, F-bottom/chimney well, cell-repellent surface, clear, sterile, with lid	1	6
655976	96 well Microplate, PS, F-bottom/chimney well, cell-repellent surface, black µClear®, sterile, with lid	8	32
655976-SIN	96 well Microplate, PS, F-bottom/chimney well, cell-repellent surface, black µClear®, sterile, with lid	1	32
781970	384 well Microplate, PS, F-bottom, cell-repellent surface, clear, sterile, with lid	1	60
781976	384 well Microplate, PS, F-bottom, cell-repellent surface, black µClear®, sterile, with lid	8	32
781976-SIN	384 well Microplate, PS, F-bottom, cell-repellent surface, black µClear®, sterile, with lid	1	32
787979	384 well Microplate, PS, U-bottom, cell-repellent surface, clear, sterile, with lid	8	32
789979	1536 well Ultra Low Base SCREENSTAR Plate, CO, cell-Repellent, sterile, flat bottom, black µClear®	17	68





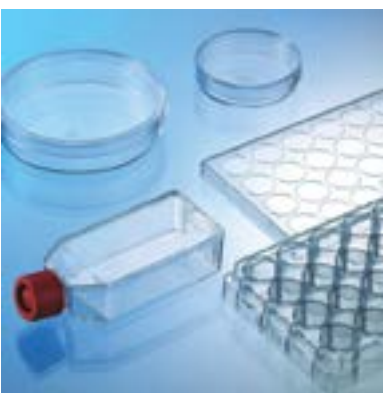
Free of detectable DNase, RNase, human DNA, non-pyrogenic, non-cytotoxic

Advanced TC™

The product range is comprised of multiwell plates, microplates, petri dishes and TC flasks. To differentiate Advanced TC™ tissue culture products from our CELLSTAR® tissue culture products, the flasks are delivered with **blue screw caps** and plates and dishes are labelled with an Advanced TC™ imprint.

- Optimized cell adherence
- Homogenous cell growth
- Higher transgene activity
- Storage at room temperature
- *In vivo*-like morphology
- Increased cell yield
- Improved assay consistency
- Two year shelf life

GBO Cat. No.	Description	Sterile	Bag Qty	Case Qty
Cell Culture Dishes				
627960	Cell Culture Dish, Ø 35 x 10 mm, Advanced TC™	Yes	10	740
628960	Cell Culture Dish, Ø 60 x 15 mm, Advanced TC™	Yes	10	600
664960	Cell Culture Dish, Ø 100 x 20 mm, Advanced TC™	Yes	15	360
Filter Cap Cell Culture Flasks				
690975	Filter Cap Cell Culture Flask, 25 cm ² , Advanced TC™	Yes	10	200
658975	Filter Cap Cell Culture Flask, 75 cm ² , Advanced TC™	Yes	5	120
660975	Filter Cap Cell Culture Flask, 175 cm ² , Max. Volume 550 mL, Advanced TC™	Yes	5	50
Standard Cap Cell Culture Flasks				
690960	Cell Culture Flask, 25 cm ² , Advanced TC™	Yes	10	200
658970	Cell Culture Flask, 75 cm ² , Advanced TC™	Yes	5	120
Multiwell Plates				
657960	6 well Plate, with lid, Advanced TC™	Yes	1	100
665980	12 well Plate, with lid, Advanced TC™	Yes	1	100
662960	24 well Plate, with lid, Advanced TC™	Yes	1	100
677980	48 well Plate, with lid, Advanced TC™	Yes	1	100
Microplates				
655980	96 well, F-bottom/chimney well, with lid, transparent, Advanced TC™	Yes	1	100
655983	96 well, F-bottom/chimney well, with lid, µClear®, white, Advanced TC™	Yes	8	32
655986	96 well, F-bottom/chimney well, with lid, µClear®, black, Advanced TC™	Yes	8	32
781983	384 well, F-bottom, µClear®, white, with lid, Advanced TC™	Yes	8	32
781986	384 well, F-bottom, µClear®, black, with lid, Advanced TC™	Yes	8	32



CELLCOAT® Protein Coated Labware – Poly-L-Lysine

- Synthetic protein, 30-70 kDa
- Promotion of cell adhesion, proliferation and growth of transfected cell lines (e.g. HEK-293, PC12, L929, certain 3T3 cell lines), neuronal cell lines as well as primary neurons and glial cells
- Ideal for low-serum, serum-free cultivation and cell differentiation
- Poly-L-Lysine coating available on dishes, flasks, multiwell plates and microplates
- Lot number and best before date on packaging
- Store at room temperature

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat No.	Format	Growth Area (cm ²)	Total Volume (mL)	Lid or Cap	Color	Pack Qty	Case Qty
628930	Dish, 60 x 15 mm	21	17	Vented lid	Clear	20	100
657930	Plate, 6 well	9.6	16.1	Condensation Ring lid	Clear	5	50
662930	Plate, 24 well	1.9	3.3	Condensation Ring lid	Clear	5	50
655930	Plate, 96 well	0.34	0.392	Condensation Ring lid	Clear	5	20
655936	Plate, 96 well	0.34	0.392	Condensation Ring lid	Black/µClear	5	20
781930	Plate, 384 well	0.1	0.131	Standard lid	Clear	5	20
781936	Plate, 384 well	0.11	0.138	Standard lid	Black/µClear	5	20

In addition to standard products listed within, custom coatings and coating overlays of extracellular matrix proteins are available for advanced applications, such as: **Fibronectin, Laminin, Collagen Type IV, Poly Ornithine and/or PLO/LAM.**



CELLCOAT® Protein Coated Labware – Poly-D-Lysine

- Synthetic protein, 75-150 kDa
- Promotion of cell adhesion, proliferation and growth of transfected cell lines (e.g. HEK-293, PC12, L929, certain 3T3 cell lines), neuronal cell lines as well as primary neurons and glial cells
- Ideal for low-serum, serum-free cultivation and cell differentiation
- Poly-D-Lysine coating available on dishes, flasks, multiwell plates and microplates
- Lot number and best before date on packaging
- Store at room temperature
- Small packaging now available

||||| All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Format	Growth Area (cm ²)	Total Volume (mL)	Lid or Cap	Color	Pack Qty	Case Qty
Dishes							
628940	Dish, 60 x 15 mm	21	17	Vented lid	Clear	20	100
664940	Dish, 100 x 20 mm	58	70	Vented lid	Clear	10	40
Flasks							
690940	Flask, 25 cm ²	25	50	Filter cap	Clear	10	50
690940-010	Flask, 25 cm ²	25	50	Filter cap	Clear	10	10
658940	Flask, 75 cm ²	75	250	Filter cap	Clear	5	50
658940-010	Flask, 75 cm ²	75	250	Filter cap	Clear	5	5
661940	Flask, 175 cm ²	175	650	Filter cap	Clear	5	40
Multiwell Plates							
657940	Plate, 6 well	9.6	16.1	Condensation Ring lid	Clear	5	50
657940-005	Plate, 6 well	9.6	16.1	Condensation Ring lid	Clear	5	5
665940	Plate, 12 well	3.9	6.5	Condensation Ring lid	Clear	5	5
665940-005	Plate, 12 well	3.9	6.5	Condensation Ring lid	Clear	5	50
662940	Plate, 24 well	1.9	3.3	Condensation Ring lid	Clear	5	50
662940-005	Plate, 24 well	1.9	3.3	Condensation Ring lid	Clear	5	5
Microplates							
655940	Plate, 96 well	0.34	0.392	Condensation Ring lid	Clear	5	20
655945	Plate, 96 well	0.34	0.392	Condensation Ring lid	White	5	20
655944	Plate, 96 well	0.34	0.392	Condensation Ring lid	White/μClear	5	20
655947	Plate, 96 well	0.34	0.392	Condensation Ring lid	Black	5	20
655946	Plate, 96 well	0.34	0.392	Condensation Ring lid	Black/μClear	5	20
655948	Plate, 96 well	0.34	0.392	Condensation Ring lid	Black/μClear	20	120
781940	Plate, 384 well	0.11	0.138	Standard lid	Clear	5	20
781945	Plate, 384 well	0.11	0.138	Standard lid	White	5	20
781944	Plate, 384 well	0.11	0.138	Standard lid	White/μClear	5	20
781947	Plate, 384 well	0.11	0.138	Standard lid	Black	5	20
781946	Plate, 384 well	0.11	0.138	Standard lid	Black/μClear	5	20
781948	Plate, 384 well	0.11	0.138	Standard lid	Black/μClear	20	120

In addition to standard products listed within, custom coatings and coating overlays of extracellular matrix proteins are available for advanced applications, such as: Fibronectin, Laminin, Collagen Type IV, Poly Ornithine and/or PLO/LAM.



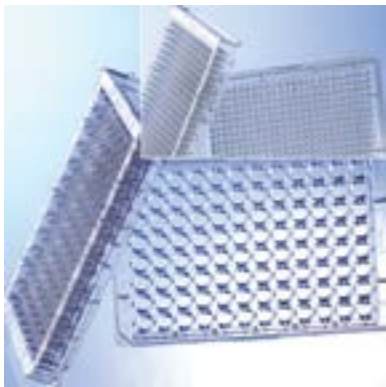
CELLCOAT® Protein Coated Labware – Collagen Type I

- Rat tail Collagen Type I, Purity > 90% by SDS-PAGE
- Promotion of cell adhesion, proliferation and growth of endothelial cells, hepatocytes, muscle cells, pheochromocytoma cells (PC12) and other cell types
- Collagen coating available on dishes, flasks, multiwell plates and microplates
- Lot number and best before date on packaging
- Store at room temperature
- Small packaging now available

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Format	Growth Area (cm ²)	Total Volume (mL)	Lid or Cap	Color	Pack Qty	Case Qty
628950	Dish, 60 x 15 mm	21	17	Vented lid	Clear	20	100
664950	Dish, 100 x 20 mm	58	70	Vented lid	Clear	10	40
690950	Flask, 25 cm ²	25	50	Filter cap	Clear	10	50
690950-010	Flask, 25 cm ²	25	50	Filter cap	Clear	10	10
658950	Flask, 75 cm ²	75	250	Filter cap	Clear	5	50
658950-005	Flask, 75 cm ²	75	250	Filter cap	Clear	5	5
661950	Flask, 175 cm ²	175	650	Filter cap	Clear	5	40
657950	Plate, 6 well	9.6	16.1	Condensation Ring lid	Clear	5	50
657950-005	Plate, 6 well	9.6	16.1	Condensation Ring lid	Clear	5	5
655950	Plate, 12 well	0.34	0.392	Condensation Ring lid	Clear	5	50
665950-005	Plate, 12 well	0.34	0.392	Condensation Ring lid	Clear	5	5
662950	Plate, 24 well	1.9	3.3	Condensation Ring lid	Clear	5	50
662950-005	Plate, 24 well	1.9	3.3	Condensation Ring lid	Clear	5	5
655956	Plate, 96 well	0.34	0.392	Condensation Ring lid	Black/μClear	5	20
781950	Plate, 384 well	0.11	0.138	Standard lid	Clear	5	20
781956	Plate, 384 well	0.11	0.138	Standard lid	Black/μClear	5	20

In addition to standard products listed within, custom coatings and coating overlays of extracellular matrix proteins are available for advanced applications, such as: Fibronectin, Laminin, Collagen Type IV, Poly Ornithine and/or PLO/LAM

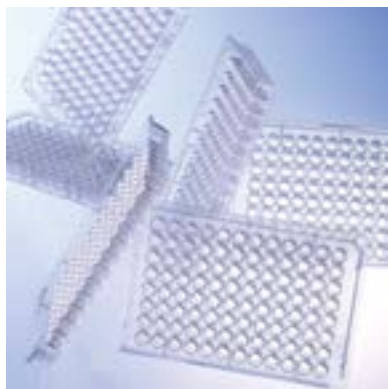


96 and 384 well Streptavidin Coated Plates Clear, Opaque Black, Opaque White & Black with μClear® Bottom, Polystyrene

- Pre-blocked
- Biotin binding capacity > 5 ng/well (96 well) and > 1.5 ng/well (384 well)
- Streptavidin leaching < 5 ng/well (96 well) and < 1 ng/well (384 well)
- Lot number and best before date on packaging
- Store at room temperature

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Plate Color	Bottom Color	Bottom Style	Chimney Style	With Lid	Pack Qty	Case Qty
655990	96 well	Clear	Clear	C	Yes	No	5	40
655997	96 well	Black	Black	C	Yes	No	5	40
655996	96 well	Black	μClear	Flat	Yes	No	5	40
655995	96 well	White	White	C	Yes	No	5	40
781990	384 well	Clear	Clear	Flat	No	No	5	40
781997	384 well	Black	Black	Flat	No	No	5	40
781996	384 well	Black	μClear	Flat	No	No	5	40
781995	384 well	White	White	Flat	No	No	5	40



96 well Microplates Clear, Polystyrene

- High clarity virgin polystyrene resin provides excellent optical clarity and consistency
- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions to meet requirements for compatibility with equipment and robotics
- C (flat bottom with angled edge), flat, round and conical well bottoms (maximum volume 370 µL for C and flat; 300 µL for round and 234 µL for conical well formats)
- MICROLON® 200 (medium binding), MICROLON® 600 (high binding) and Non-binding formats available for consistent performance in binding assays
- CELLSTAR® formats available TC-treated and non-treated for culture of anchorage dependent cells and suspension culture, respectively
- Chimney well design reduces risk of cross-contamination and facilitates sealing by cap mat, thermal sealer or adhesive sealer; non-chimney well design also available

Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

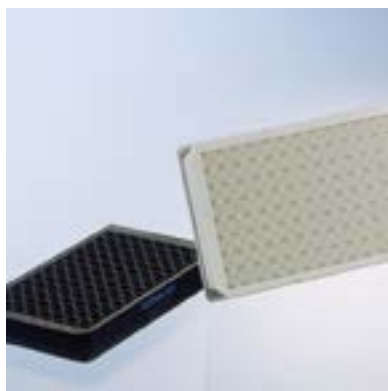
 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Bottom Style	Chimney Style	Plate Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
655101	96 well	Flat	No	Clear	–	None	No	No	5	100
655001	96 well	Flat	No	Clear	MICROLON 200	Medium Bind	No	No	5	40
655061	96 well	Flat	No	Clear	MICROLON 600	High Bind	Yes	No	5	40
655061-25**	96 well	Flat	No	Clear	MICROLON 600	High Bind	Yes	No	25	150
655080	96 well	Flat	Yes	Clear	MICROLON 200	Medium Bind	No	No	5	40
655081	96 well	Flat	Yes	Clear	MICROLON 600	High Bind	Yes	No	5	40
655085	96 well	Flat w/ curved edge	Yes	Clear	MICROLON 600	High Bind	Yes	No	5	40
655161	96 well	Flat	No	Clear	–	None	Yes	No	2	100
655163	96 well	Flat	No	Clear	–	None	Yes	No	25	375
655185	96 well	Flat	Yes	Clear	CELLSTAR	None	Yes	Yes*	1	60
655160	96 well	Flat	Yes	Clear	CELLSTAR	TC	Yes	No	1	100
655162	96 well	Flat	Yes	Clear	CELLSTAR	TC	Yes	No	5	100
655180	96 well	Flat	Yes	Clear	CELLSTAR	TC	Yes	Yes*	1	100
655182	96 well	Flat	Yes	Clear	CELLSTAR	TC	Yes	Yes*	10	160
655901	96 well	Flat	Yes	Clear	Clear	Non-binding	No	No	10	40
655970	96 well	Flat	Yes	Clear	CELLSTAR	Cell-Repellent	Yes	Yes	1	6
655980	96 well	Flat	Yes	Clear	Advanced TC	Advanced TC	Yes	Yes	1	100
650101	96 well	Round	No	Clear	–	None	No	No	5	100
650172	96 well	Round	No	Clear	–	None	No	No	25	375
650001	96 well	Round	No	Clear	MICROLON 200	Medium Bind	No	No	5	40
650061	96 well	Round	No	Clear	MICROLON 600	High Bind	Yes	No	5	40
650161	96 well	Round	No	Clear	–	None	Yes	No	2	100
650162	96 well	Round	No	Clear	–	None	Yes	No	25	375
650160	96 well	Round	No	Clear	CELLSTAR	TC	Yes	No	1	100
650180	96 well	Round	No	Clear	CELLSTAR	TC	Yes	Yes	1	100
650185	96 well	Round	No	Clear	CELLSTAR	None	Yes	Yes	1	60
650901	96 well	Round	No	Clear	Clear	Non-binding	No	No	10	40
650970	96 well	Round	No	Clear	CELLSTAR	Cell-Repellent	Yes	Yes	1	6
650979	96 well	Round	No	Clear	CELLSTAR	Cell-Repellent	Yes	Yes	8	32
651001	96 well	Conical	No	Clear	MICROLON 200	Medium Bind	No	No	5	40
651061	96 well	Conical	No	Clear	MICROLON 600	High Bind	Yes	No	5	40
651101	96 well	Conical	No	Clear	–	None	No	No	5	100
651161	96 well	Conical	No	Clear	–	None	Yes	No	2	100
651162	96 well	Conical	No	Clear	–	None	Yes	No	25	375
651160	96 well	Conical	No	Clear	CELLSTAR	TC	Yes	No	1	100
651180	96 well	Conical	No	Clear	CELLSTAR	TC	Yes	Yes	1	100
651901	96 well	Conical	No	Clear	Clear	Non-binding	No	No	10	40
651970	96 well	Conical	No	Clear	CELLSTAR	Cell-Repellent	Yes	Yes	1	6

* Lids with condensation rings for low evaporation.

** Minimum order quantities apply.

NOTE: CELLCOAT® Protein Coated Microplates are located on pages 26 and 27.



96 well Microplates Opaque Black & Opaque White, Polystyrene

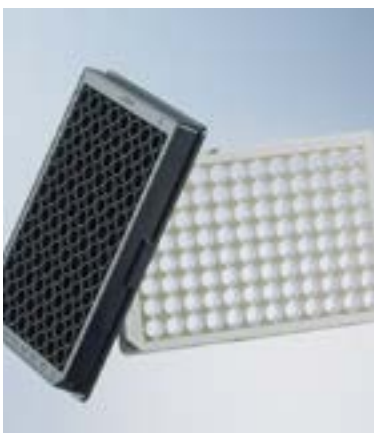
- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions to meet requirements for compatibility with equipment and robotics
- Flat well bottom (370 μ L maximum well volume)
- White plates for luminescence assays; black plates for fluorescence assays
- LUMITRAC™, FLUOTRAC™ and CELLSTAR® formats satisfy a wide variety of applications, including cell based assays
- Lowest autofluorescence for fluorescent applications; lowest crosstalk for luminescent applications
- Chimney style; Sterile or Non-sterile; With and without condensation ring lids
- Sterile, High Binding versions without TC Treatment for Suspension Cell Culture

Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Bottom Style	Chimney Style	Plate Color	Bottom Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
655076	96 well	Flat	Yes	Black	Black	FLUOTRAC 200	Medium Bind	No	No	5	40
655077	96 well	Flat	Yes	Black	Black	FLUOTRAC 600	High Bind	Yes	No	5	40
655075	96 well	Flat	Yes	White	White	LUMITRAC 200	Medium Bind	No	No	5	40
655074	96 well	Flat	Yes	White	White	LUMITRAC 600	High Bind	Yes	No	5	40
655079	96 well	Flat	Yes	Black	Black	CELLSTAR	TC	Yes	No	10	40
655086	96 well	Flat	Yes	Black	Black	CELLSTAR	TC	Yes	Yes	8	32
655073	96 well	Flat	Yes	White	White	CELLSTAR	TC	Yes	No	10	40
655083	96 well	Flat	Yes	White	White	CELLSTAR	TC	Yes	Yes	8	32
655900	96 well	Flat	Yes	Black	Black	-	Non-Binding	No	No	10	40
655904	96 well	Flat	Yes	White	White	-	Non-Binding	No	No	10	40



96 well Microplates Black & White with μ Clear® Bottom, Polystyrene and Cycloolefin

- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions to meet requirements for compatibility with equipment and robotics
- Flat well bottom (370 μ L maximum well volume)
- White plates for luminescence assays; black plates for fluorescence assays
- LUMITRAC™, FLUOTRAC™ and CELLSTAR® formats satisfy a wide variety of applications, including cell based assays
- Lowest autofluorescence for fluorescent applications; lowest crosstalk for luminescent applications
- μ Clear® plates ideal for assays when detection or imaging from the bottom is desired
- Patented process for adhesion of ultra-thin (190 μ m) bipolar stretched μ Clear films
- Chimney style; With or without condensation ring lids
- Sterile, High Binding versions without TC Treatment for Suspension Cell Culture

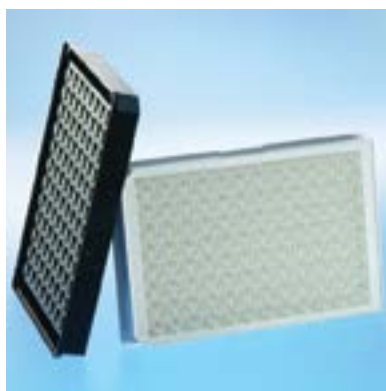
Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Chimney Style	Plate Color	Bottom Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
655096	96 well	Yes	Black	μ Clear	FLUOTRAC 200	Medium Bind	No	No	10	40
655097	96 well	Yes	Black	μ Clear	FLUOTRAC 600	High Bind	Yes	No	10	40
655976	96 well	Yes	Black	μ Clear	Cell Repellent	Cell Repellent	Yes	Yes	8	32
655976-SIN	96 well	Yes	Black	μ Clear	Cell Repellent	Cell Repellent	Yes	Yes	1	32
655094	96 well	Yes	White	μ Clear	LUMITRAC 600	High Bind	Yes	No	10	40
655095	96 well	Yes	White	μ Clear	LUMITRAC 200	Medium Bind	No	No	10	40
655087	96 well	Yes	Black	μ Clear	CELLSTAR	TC	Yes	No	10	40
655090*	96 well	Yes	Black	μ Clear	CELLSTAR	TC	Yes	Yes	8	32
655088	96 well	Yes	White	μ Clear	CELLSTAR	TC	Yes	No	10	40
655098	96 well	Yes	White	μ Clear	CELLSTAR	TC	Yes	Yes	8	32
655866	96 well	Yes	Black	Clear	SCREENSTAR	TC	Yes	Yes	1	16
655983	96 well	Yes	White	μ Clear	Advanced TC	Advanced TC	Yes	Yes	8	32
655986	96 well	Yes	Black	μ Clear	Advanced TC	Advanced TC	Yes	Yes	8	32
655903	96 well	Yes	White	Clear	-	Non-Binding	No	No	10	40
655906	96 well	Yes	Black	Clear	-	Non-Binding	No	No	10	40

* Also available with Black lid as GBO Cat. No. 655090-99



96 well Half Area Microplates Clear, Opaque Black & Opaque White, Polystyrene

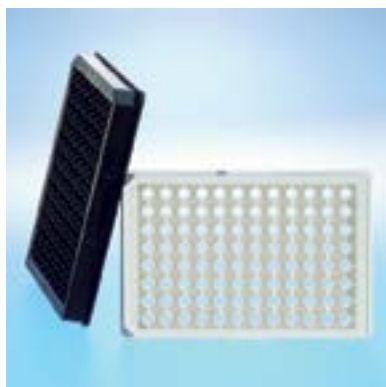
- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions to meet requirements for compatibility with equipment and robotics
- Half Area microplates provide savings on reagents without having to incur capital investment to higher density plates. Sample volume is reduced by up to 50%
- LUMITRAC™, FLUOTRAC™ and CELLSTAR® formats satisfy a wide variety of applications, including cell based assays
- Lowest autofluorescence for fluorescent applications; lowest crosstalk for luminescent applications
- Sterile, High Binding versions without TC Treatment for Suspension Cell Culture

Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Plate Style	Bottom Style	Chimney Style	Plate Color	Bottom Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
675101	96 well	Half Area	Flat	Yes	Clear	Clear	–	None	No	No	10	40
675001	96 well	Half Area	Flat	Yes	Clear	Clear	MICROLON 200	Medium Bind	No	No	10	40
675061	96 well	Half Area	Flat	Yes	Clear	Clear	MICROLON 600	High Bind	Yes	No	10	40
675076	96 well	Half Area	Flat	Yes	Black	Black	FLUOTRAC 200	Medium Bind	Yes	No	10	40
675077	96 well	Half Area	Flat	Yes	Black	Black	FLUOTRAC 600	High Bind	Yes	No	10	40
675074	96 well	Half Area	Flat	Yes	White	White	LUMITRAC 600	High Bind	Yes	No	10	40
675075	96 well	Half Area	Flat	Yes	White	White	LUMITRAC 200	Medium Bind	No	No	10	40
675161	96 well	Half Area	Flat	Yes	Clear	Clear	–	None	Yes	No	10	40
675180	96 well	Half Area	Flat	Yes	Clear	Clear	CELLSTAR	TC	Yes	Yes	8	32
675086	96 well	Half Area	Flat	Yes	Black	Black	CELLSTAR	TC	Yes	Yes	8	32
675083	96 well	Half Area	Flat	Yes	White	White	CELLSTAR	TC	Yes	Yes	8	32



96 well Half Area Microplates Black & White with μ Clear® Bottom, Polystyrene

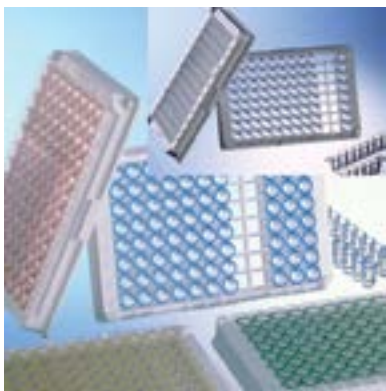
- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions for equipment compatibility
- Half Area microplates provide savings on reagents without having to incur capital investment to higher density plates. Sample volume is reduced by up to 50%
- LUMITRAC™, FLUOTRAC™ and CELLSTAR® formats satisfy a wide variety of applications, including cell based assays
- Lowest autofluorescence for fluorescent applications; lowest crosstalk for luminescent applications
- μ Clear® plates with Ultra-Thin (190 μ m) film are ideal for assays when detection or imaging from the bottom is desired
- Sterile, High Binding versions without TC Treatment for Suspension Cell Culture

Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Plate Style	Bottom Style	Chimney Style	Plate Color	Bottom Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
675096	96 well	Half Area	Flat	Yes	Black	μ Clear	FLUOTRAC 200	Medium Bind	No	No	10	40
675097	96 well	Half Area	Flat	Yes	Black	μ Clear	FLUOTRAC 600	High Bind	Yes	No	10	40
675095	96 well	Half Area	Flat	Yes	White	μ Clear	LUMITRAC 200	Medium Bind	No	No	10	40
675094	96 well	Half Area	Flat	Yes	White	μ Clear	LUMITRAC 600	High Bind	Yes	No	10	40
675090	96 well	Half Area	Flat	Yes	Black	μ Clear	CELLSTAR	TC	Yes	Yes	8	32
675098	96 well	Half Area	Flat	Yes	White	μ Clear	CELLSTAR	TC	Yes	Yes	8	32



96 well Strip Plates Clear, Assembled With Frames, Polystyrene

- 1 x 8 Break-Apart, 1 x 8 Standard, 2 x 8 and 1 x 12 strip plate formats
- C (flat bottom with angled edge), flat and round bottom well options
- MICROLON® 200 (medium binding) and MICROLON® 600 (high binding) treatments
- Pre-assembled in white frames for secure processing
- Standard 1 x 8, 2 x 8 and 1 x 12 strips also sold without frames

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Strip Format	Bottom Style	Feature	Binding	Strip Color	Rim Color	Pack Qty	Case Qty
705070	96 well	Break-Apart, 1 x 8 well	Conical	MICROLON 200	Medium	Clear	Clear	5	100
705071	96 well	Break-Apart, 1 x 8 well	Conical	MICROLON 600	High	Clear	Clear	5	100
705073	96 well	Break-Apart, 1 x 8 well	Conical	MICROLON 600	High	Clear	Red	5	100
705074	96 well	Break-Apart, 1 x 8 well	Conical	MICROLON 600	High	Clear	Blue	5	100
705075	96 well	Break-Apart, 1 x 8 well	Conical	MICROLON 600	High	Clear	Green	5	100
705076	96 well	Break-Apart, 1 x 8 well	Conical	MICROLON 600	High	Clear	Yellow	5	100
762070	96 well	Standard, 1 x 8 well	Flat	MICROLON 200	Medium	Clear	Clear	5	100
762071	96 well	Standard, 1 x 8 well	Flat	MICROLON 600	High	Clear	Clear	5	100
767070	96 well	Standard, 1 x 8 well	Round	MICROLON 200	Medium	Clear	Clear	5	100
767071	96 well	Standard, 1 x 8 well	Round	MICROLON 600	High	Clear	Clear	5	100
701070	96 well	Standard, 1 x 12 well	Flat	MICROLON 200	Medium	Clear	Clear	5	100
701071	96 well	Standard, 1 x 12 well	Flat	MICROLON 600	High	Clear	Clear	5	100
754070	96 well	Standard, 2 x 8 well	Round	MICROLON 200	Medium	Clear	Clear	5	100
754061	96 well	Standard, 2 x 8 well	Round	MICROLON 600	High	Clear	Clear	5	100
756070	96 well	Standard, 2 x 8 well	Flat	MICROLON 200	Medium	Clear	Clear	5	100
756071	96 well	Standard, 2 x 8 well	Flat	MICROLON 600	High	Clear	Clear	5	100

Unassembled plate frames and well strips also sold separately. Contact Greiner Bio-One for catalog numbers.



96 well Strip Plates Opaque Black & Opaque White, Assembled With Frames, Polystyrene

- 1 x 8 Standard, flat bottom, black or white strip plates
- FLUOTRAC™ 200 (medium binding) and FLUOTRAC™ 600 (high binding) black plates for fluorescence applications
- LUMITRAC™ 200 (medium binding) and LUMITRAC™ 600 (high binding) white plates for luminescence applications
- Pre-assembled in white frames for secure processing

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Strip Format	Bottom Style	Feature	Binding	Strip Color	Frame Color	Pack Qty	Case Qty
762074	96 well	Standard, 1 x 8 well	Flat	LUMITRAC 600	High	White	White	5	100
762075	96 well	Standard, 1 x 8 well	Flat	LUMITRAC 200	Medium	White	White	5	100
762076	96 well	Standard, 1 x 8 well	Flat	FLUOTRAC 200	Medium	Black	White	10	100
762077	96 well	Standard, 1 x 8 well	Flat	FLUOTRAC 600	High	Black	White	10	100
705091	96 well	1 x 8 Break apart	C-Bottom	Lumitrac 200	Medium	White	White	5	100
705092	96 well	1 x 8 Break apart	C-Bottom	Lumitrac 600	High	White	White	5	100



384 well Small Volume™ Microplates

Clear, Opaque Black, Opaque White, Black & White with μ Clear® Bottom, Polystyrene and Cycloolefin

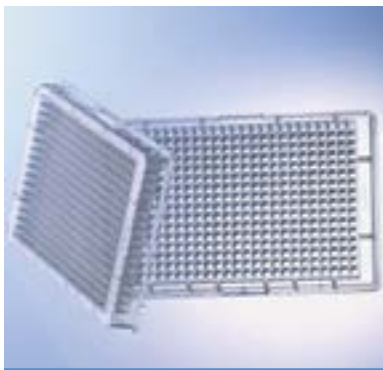
- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions for equipment compatibility
- Provides additional savings on reagents without having to incur capital investment to higher density plates
- Compatible with all standard 384 well plate readers and dispensers (manual & automated)
- Round wells with conical geometry terminating in flat well bottom (28 μ L maximum well volume) allows for improved detection limits
- LUMITRAC™, FLUOTRAC™ and CELLSTAR® formats for a variety of applications, including cell based assays
- Lowest autofluorescence for fluorescent applications; lowest crosstalk for luminescent applications
- HiBase and LoBase platforms; LoBase platform ultra-thin (75 μ m) μ Clear® plates ideal for assays when detection or imaging from the bottom is desired
- Sterile, High Binding versions without TC Treatment for Suspension Cell Culture

Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Plate Style	Bottom Style	Chimney Style	Plate Color	Bottom Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
784101	384 well	HiBase	Flat	No	Clear	Clear	–	None	No	No	10	40
784076	384 well	HiBase	Flat	No	Black	Black	FLUOTRAC 200	Medium Bind	No	No	10	40
784076-25	384 well	HiBase	Flat	No	Black	Black	FLUOTRAC 200	Medium Bind	No	No	25	150
784077	384 well	HiBase	Flat	No	Black	Black	FLUOTRAC 600	High Bind	No	No	10	40
784075	384 well	HiBase	Flat	No	White	White	LUMITRAC 200	Medium Bind	No	No	10	40
784075-25	384 well	HiBase	Flat	No	White	White	LUMITRAC 200	Medium Bind	No	No	25	150
784074	384 well	HiBase	Flat	No	White	White	LUMITRAC 600	High Bind	No	No	10	40
784086	384 well	HiBase	Flat	No	Black	Black	CELLSTAR	TC	Yes	Yes	8	32
784080	384 well	HiBase	Flat	No	White	White	CELLSTAR	TC	Yes	Yes	8	32
784900	384 well	HiBase	Flat	No	Black	Black	–	Non-binding	No	No	10	40
784904	384 well	HiBase	Flat	No	White	White	–	Non-binding	No	No	10	40
788091	384 well	LoBase	Flat	Yes	Black	μ Clear	CELLSTAR	TC	Yes	Yes	15	60
788876	384 well	LoBase	Flat	Yes	Black	μ Clear	–	None	No	No	10	80
788890	384 well	LoBase	Flat	Yes	Black	μ Clear	CELLSTAR	TC	Yes	No	10	80
793855	384 well	HiBase	Flat	No	Clear	Clear	–	None	No	No	15	60
793865	384 well	HiBase	Flat	No	Clear	Clear	–	TC	Yes	No	15	60



384 well Microplates Clear, Polystyrene

- High clarity virgin polystyrene resin provides excellent optical clarity and consistency
- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions to meet requirements for compatibility with equipment and robotics
- Square-round well geometry minimizes wicking and reduces air bubble formation
- Flat well bottom (131 µL maximum well volume)
- MICROLON® 200 (medium binding) and MICROLON® 600 (high binding) formats available for consistent performance in binding assays
- CELLSTAR® TC-treated formats for culture of anchorage dependent cells
- Sterile, High Binding versions without TC Treatment for Suspension Cell Culture

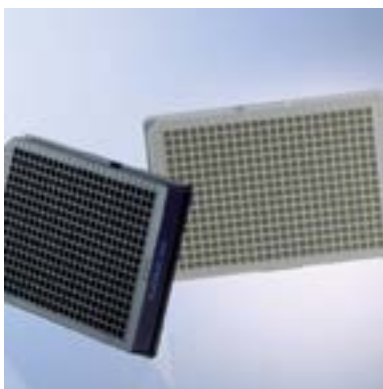
NOTE: CELLCOAT® Protein Coated Microplates are located on pages 26 and 27.

Free of detectable DNase, RNase, human DNA non-pyrogenic non-cytotoxic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Bottom Style	Chimney Style	Plate Color	Bottom Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
781101	384 well	Flat	No	Clear	Clear	–	None	No	No	10	100
781162	384 well	Flat	No	Clear	Clear	–	None	Yes	No	10	100
781186	384 well	Flat	No	Clear	Clear	–	None	Yes	Yes	8	32
781185	384 well	Flat	No	Clear	Clear	–	None	Yes	Yes	1	32
781061*	384 well	Flat	No	Clear	Clear	MICROLON 600	High Bind	Yes	No	10	40
781165	384 well	Flat	No	Clear	Clear	CELLSTAR	TC	Yes	No	10	40
781182	384 well	Flat	No	Clear	Clear	CELLSTAR	TC	Yes	Yes	8	32
781970	384 well	Flat	No	Clear	Clear	CELLSTAR	Cell-Repellent	Yes	Yes	1	60
781901	384 well	Flat	No	Clear	Clear	–	Non-binding	No	No	10	40
787979	384 well	Round	No	Clear	Clear	CELLSTAR	Cell-Repellent	Yes	Yes	8	32

* Also available in bulk packaging as GBO Cat. No. 781061-25



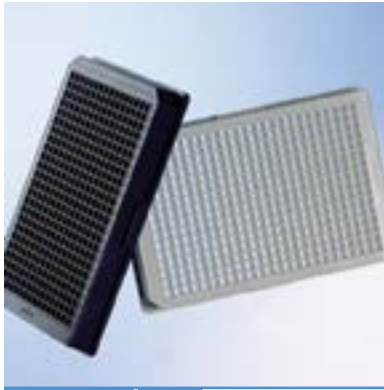
384 well Microplates Opaque Black & Opaque White, Polystyrene

- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions to meet requirements for compatibility with equipment and robotics
- Square-round well geometry minimizes wicking and reduces air bubble formation
- Flat well bottom (131 µL maximum well volume)
- White plates for luminescence assays; black plates for fluorescence assays
- LUMITRAC™, FLUOTRAC™ and CELLSTAR® formats satisfy a wide variety of applications, including cell based assays
- Lowest autofluorescence for fluorescent applications; lowest crosstalk for luminescent applications
- Sterile, High Binding versions without TC Treatment for Suspension Cell Culture

Free of detectable DNase, RNase, human DNA non-pyrogenic non-cytotoxic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Bottom Style	Chimney Style	Plate Color	Bottom Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
781076	384 well	Flat	No	Black	Black	FLUOTRAC 200	Medium Bind	No	No	10	40
781077	384 well	Flat	No	Black	Black	FLUOTRAC 600	High Bind	Yes	No	10	40
781077-25	384 well	Flat	No	Black	Black	FLUOTRAC 600	High Bind	Yes	No	25	150
781075	384 well	Flat	No	White	White	LUMITRAC 200	Medium Bind	No	No	10	40
781074	384 well	Flat	No	White	White	LUMITRAC 600	High Bind	Yes	No	10	40
781074-25	384 well	Flat	No	White	White	LUMITRAC 600	High Bind	Yes	No	25	150
781079	384 well	Flat	No	Black	Black	CELLSTAR	TC	Yes	No	10	40
781086	384 well	Flat	No	Black	Black	CELLSTAR	TC	Yes	Yes	8	32
781073	384 well	Flat	No	White	White	CELLSTAR	TC	Yes	No	10	40
781080	384 well	Flat	No	White	White	CELLSTAR	TC	Yes	Yes	8	32
781080-20	384 well	Flat	No	White	White	CELLSTAR	TC	Yes	Yes	20	120
781900	384 well	Flat	No	Black	Black	–	Non-binding	No	No	10	40
781904	384 well	Flat	No	White	White	–	Non-binding	No	No	10	40



384 well Microplates

Black & White with μ Clear® Bottom, Polystyrene and Cycloolefin

- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions to meet requirements for compatibility with equipment and robotics
- μ Clear® plates ideal for assays when detection or imaging from the bottom is desired
- Patented process for adhesion of ultra-thin (190 μ m) bipolar stretched μ Clear films
- LUMITRAC™, FLUOTRAC™ and CELLSTAR® formats satisfy a wide variety of applications, including cell based assays
- Lowest autofluorescence for fluorescent applications; lowest crosstalk for luminescent applications
- Sterile, High Binding versions without TC Treatment for Suspension Cell Culture

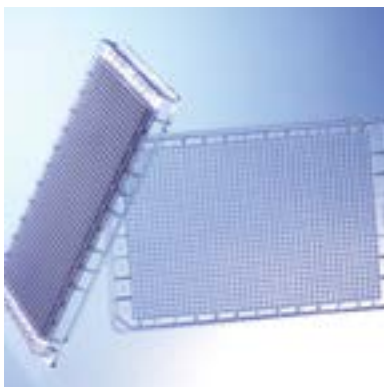
Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Bottom Style	Chimney Style	Plate Color	Bottom Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
781096	384 well	Flat	No	Black	μ Clear	FLUOTRAC 200	Medium Bind	No	No	10	40
781097	384 well	Flat	No	Black	μ Clear	FLUOTRAC 600	High Bind	No	No	10	40
781095	384 well	Flat	No	White	μ Clear	LUMITRAC 200	Medium Bind	No	No	10	40
781094	384 well	Flat	No	White	μ Clear	LUMITRAC 600	High Bind	No	No	10	40
781092	384 well	Flat	No	Black	μ Clear	CELLSTAR	TC	Yes	No	10	40
781091	384 well	Flat	No	Black	μ Clear	CELLSTAR	TC	Yes	Yes	8	32
781090*	384 well	Flat	No	Black	μ Clear	CELLSTAR	TC	Yes	Yes	20	120
						SCREENSTAR					
781866	384 well	Flat	No	Black	μ Clear	Ultra Low Well Base	TC	Yes	Yes	8	32
781093	384 well	Flat	No	White	μ Clear	CELLSTAR	TC	Yes	No	10	40
781098	384 well	Flat	No	White	μ Clear	CELLSTAR	TC	Yes	Yes	8	32
781983	384 well	Flat	No	White	μ Clear	Advanced TC	Advanced TC	Yes	Yes	8	32
781986	384 well	Flat	No	Black	μ Clear	Advanced TC	Advanced TC	Yes	Yes	8	32
781903	384 well	Flat	No	White	μ Clear	-	Non-binding	No	No	10	40
781906	384 well	Flat	No	Black	μ Clear	-	Non-binding	No	No	10	40
781976	384 well	Flat	No	Black	μ Clear	Cell-Repellent	Cell-Repellent	Yes	Yes	8	32
781976-SIN	384 well	Flat	No	Black	μ Clear	Cell-Repellent	Cell-Repellent	Yes	Yes	1	32

* Also available with black lid as GBO Cat. No. 781090-99



1536 well Microplates

Clear, Polystyrene and Cycloolefin

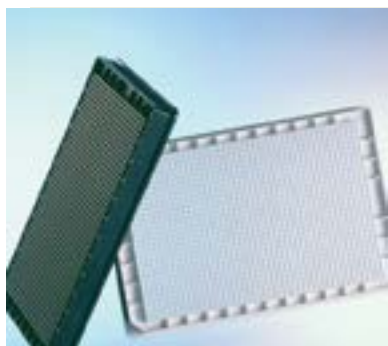
- High clarity virgin polystyrene resin provides excellent optical clarity and consistency
- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions to meet requirements for compatibility with equipment and robotics
- Square-round well geometry minimizes wicking and reduces air bubble formation
- Flat well bottom (12.6 μ L maximum well volume)
- MICROLON® 600 (high binding) format available for consistent performance in binding assays
- CELLSTAR® TC-treated format for culture of anchorage dependent cells
- HiBase and LoBase platforms
- Sterile, High Binding versions without TC Treatment for Suspension Cell Culture

Free of detectable DNase, RNase, human DNA
non-pyrogenic

non-cytotoxic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Plate Style	Bottom Style	Chimney Style	Plate Color	Bottom Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
782101	1536 well	HiBase	Flat	No	Clear	Clear	-	None	No	No	15	60
782061	1536 well	HiBase	Flat	No	Clear	Clear	MICROLON 600	High Bind	No	Yes	15	60
782180	1536 well	HiBase	Flat	No	Clear	Clear	CELLSTAR	TC	Yes	Yes	1	40
782855	1536 well	Standard	Flat	No	Clear	Clear	-	Non-treated	No	No	15	60
783061	1536 well	LoBase	Flat	No	Clear	Clear	MICROLON 600	High Bind	No	Yes	15	60
783160	1536 well	LoBase	Flat	No	Clear	Clear	CELLSTAR	TC	Yes	No	15	60
782865	1536 well	HiBase	Flat	No	Clear	Clear		TC	Yes	No	15	60



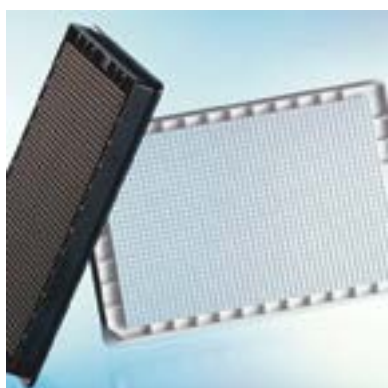
Free of detectable DNase, RNase, human DNA, non-pyrogenic non-cytotoxic

1536 well Microplates Opaque Black & Opaque White, Polystyrene

- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions to meet requirements for compatibility with equipment and robotics
- Square-round well geometry minimizes wicking and reduces air bubble formation
- Flat well bottom (12.6 μ L maximum well volume)
- White plates for luminescence assays; black plates for fluorescence assays
- LUMITRAC™, FLUOTRAC™ and CELLSTAR® formats for a variety of applications, including cell based assays
- Lowest autofluorescence for fluorescent applications; lowest crosstalk for luminescent applications
- HiBase and LoBase platforms
- Sterile, High Binding versions without TC Treatment for Suspension Cell Culture

All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Plate Style	Bottom Style	Chimney Style	Plate Color	Bottom Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
782076	1536 well	HiBase	Flat	No	Black	Black	FLUOTRAC 200	Medium Bind	No	No	15	60
782077	1536 well	HiBase	Flat	No	Black	Black	FLUOTRAC 600	High Bind	Yes	No	15	60
782075	1536 well	HiBase	Flat	No	White	White	LUMITRAC 200	Medium Bind	No	No	15	60
782074	1536 well	HiBase	Flat	No	White	White	LUMITRAC 600	High Bind	Yes	No	15	60
782086	1536 well	HiBase	Flat	No	Black	Black	CELLSTAR	TC	Yes	Yes	10	40
782078	1536 well	HiBase	Flat	No	Black	Black	CELLSTAR	TC	Yes	No	15	60
782080	1536 well	HiBase	Flat	No	White	White	CELLSTAR	TC	Yes	Yes	10	40
782073	1536 well	HiBase	Flat	No	White	White	CELLSTAR	TC	Yes	No	15	60
782900	1536 well	HiBase	Flat	No	Black	Black	-	Non-binding	No	No	15	60
782904	1536 well	HiBase	Flat	No	White	White	-	Non-binding	No	No	15	60



Free of detectable DNase, RNase, human DNA, non-pyrogenic non-cytotoxic

1536 well Microplates Black & White with μ Clear® Bottom, Polystyrene and Cycloolefin

- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions for equipment compatibility
- μ Clear® plates ideal for assays when detection or imaging from the bottom is desired
- Patented process for adhesion of ultra-thin bipolar stretched μ Clear® films
- Flat well bottom
- White plates for luminescence assays; black plates for fluorescence assays
- LUMITRAC™, FLUOTRAC™ and CELLSTAR® formats for a variety of applications, including cell based assays
- Lowest autofluorescence for fluorescent applications; lowest crosstalk for luminescent applications
- HiBase and LoBase platforms
- Sterile, High Binding versions without TC Treatment for Suspension Cell Culture

All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Plate Style	Bottom Style	Chimney Style	Plate Color	Bottom Color	Feature	Treatment	Sterile	With Lid	Pack Qty	Case Qty
782096	1536 well	HiBase	Flat	No	Black	μ Clear	FLUOTRAC 200	Medium Bind	No	No	15	60
782097	1536 well	HiBase	Flat	No	Black	μ Clear	FLUOTRAC 600	High Bind	Yes	No	15	60
782095	1536 well	HiBase	Flat	No	White	μ Clear	LUMITRAC 200	Medium Bind	No	No	15	60
782094*	1536 well	HiBase	Flat	No	White	μ Clear	LUMITRAC 600	High Bind	Yes	No	15	60
782092	1536 well	HiBase	Flat	No	Black	μ Clear	CELLSTAR	TC	Yes	No	15	60
782093*	1536 well	HiBase	Flat	No	White	μ Clear	CELLSTAR	TC	Yes	No	15	60
783097	1536 well	LoBase	Flat	No	Black	μ Clear	FLUOTRAC 600	High Bind	Yes	No	15	60
789866	1536 well	Ultra LoBase	Flat	No	Black	μ Clear	SCREENSTAR Ultra Low Well Base	TC	Yes	No	17	68
789896	1536 well	Ultra LoBase	Flat	No	Black	μ Clear	SCREENSTAR Ultra Low Well Base	None	No	No	17	68

*Minimum order quantities apply.

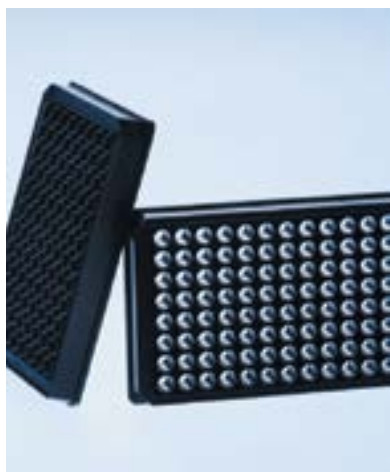


Terasaki Plates

- Manufactured from crystal clear polystyrene for microscopic examinations
- Smooth hydrophilic surface suitable for serological determination of Human Leukocyte Antigens
- 60 and 72 well formats
- Individual well volume of 10 μ L
- Available in traditional height or space saver design with recessed lid
- Select high throughput folding carton packaging or inner wrapped sleeves of 10 plates

GBO Cat. No.	Well Density	Space Saver Design with Recessed Lid	Lids Included	Pack Qty	Case Qty
653180	60 well	No	1 per plate	10	270
653190*	60 well	No	1 per plate	120*	480
659180	60 well	Yes	1 per 10 plates	10	200
659190	60 well	Yes	1 per plate	150*	1200
659190P	60 well	Yes	1 per plate	150*	150
654180	72 well	No	1 per plate	10	270
769180	72 well	Yes	1 per 10 plates	10	200
769190	72 well	Yes	1 per plate	150*	1200
769190P	72 well	Yes	1 per plate	150*	150

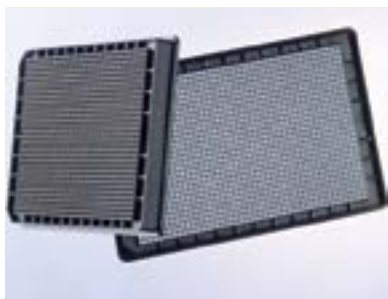
*Folding carton



SCREENSTAR Microplates Microplate for High Resolution Microscopy

- Recessed film bottom facilitating the use of lenses with low working distance and high aperture
- Cycloolefin film bottom with 190 μ m thickness and reduced background in the lower UV
- Superior film quality to enable high-quality images at high magnification
- Protective film on optical bottom to diminish airborne contamination and surface defects
- Round well geometry to reduce optical distortions
- 96 well features protective film on plate bottom that must be removed before use
- Proven cell culture surface treatment with reliable and homogenous cell growth
- Individually wrapped plate with lid and easy-to-open packaging
- Also available as Glass Bottom SensoPlate™ Plus (30618-030/655891)

GBO Cat. No.	Well Density	Plate Style	Bottom Style	Chimney Style	Plate Color	Bottom Color	Sterile	With Lid	Feature	Treatment	Pieces/ Bag	Pieces/ Box
655866	96 well	SCREENSTAR	Flat	Yes	Black	Clear	Yes	Yes	Ultra Low Well Base	TC	1	16
781866	384 well	SCREENSTAR	Flat	No	Black	Clear	Yes	Yes	Ultra Low Well Base	TC	8	32
789866	1536 well	SCREENSTAR	Flat	No	Black	Clear	Yes	Yes	Ultra Low Well Base	TC	17	68
789896	1536 well	SCREENSTAR	Flat	No	Black	Clear	No	No	Ultra Low Well Base	None	17	68



SensoPlate™ Glass Bottom Microplates

- Ideal for fluorescence correlation spectroscopy (FCS)
- Available in 24, 96 and 384 well formats
- Low autofluorescence, high optical clarity
- 175 µm borosilicate glass bottom and black polystyrene frame
- Bottom flatness better than 100 µm
- Biocompatible adhesive
- Transmission measurement capability in wavelength range above 350 nm
- Sterile, with lid

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

||||| All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Plate Style	Bottom Style	Bottom	Plate Color	Chimney Style	Treated	Sterile	With Lid	Pack Qty	Case Qty
662892	24 well		Flat	Glass	Black	Yes	No	Yes	Yes	1	12
662892P	24 well		Flat	Glass	Black	Yes	No	Yes	Yes	1	1
655892	96 well		Flat	Glass	Black	Yes	No	Yes	Yes	1	16
655892P	96 well		Flat	Glass	Black	Yes	No	Yes	Yes	1	1
781892	384 well		Flat	Glass	Black	No	No	Yes	Yes	1	16
781892P	384 well		Flat	Glass	Black	No	No	Yes	Yes	1	1
783892	1536 well	LoBase	Flat	Glass	Black	No	No	Yes	Yes	1	16
783892P	1536 well	LoBase	Flat	Glass	Black	No	No	Yes	Yes	1	1



CELLVIEW™ Microplates Glass Bottom Microplates

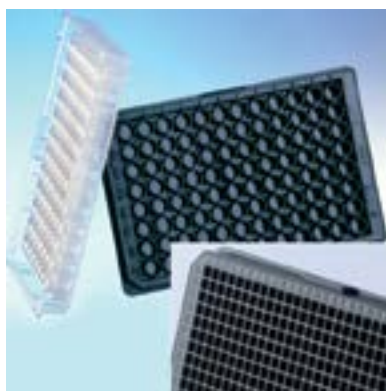
- Ultra low well base enables high magnification, high numerical aperture imaging
- 96, 384 and 1536 well formats
- Lids sold separately (pg. 48)
- For High-Content Screening applications

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

||||| All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Plate Style	Bottom Style	Bottom	Plate Color	Chimney Style	Treated	Sterile	With Lid	Pack Qty	Case Qty
655891	96 well	extra LoBase	Flat	Glass	Black	No	Yes	Yes	Yes	1	16
781855	384 well	extra LoBase	Flat	Glass	Black	No	Yes	Yes	No	1	16
783856*	1536 well	extra LoBase	Flat	Glass	Black	No	No	No	No	1	16

*Please inquire with GBO Account Manager.



96 and 384 well Microplates Polypropylene

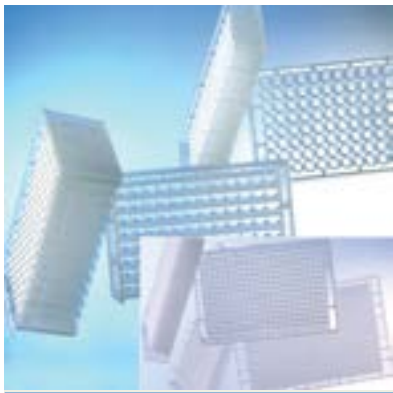
- Virgin polypropylene resin
- Biologically inert
- High chemical and thermal resistance (-196 °C to +121 °C)
- Manufactured in molds engineered specifically for polypropylene
- Conforms to ANSI/SBS - 1 (2004) Standards
- Footprint Dimensions to meet requirements for compatibility with equipment and robotics
- 96 well: Chimney-well design with flat, round and conical well bottoms having 390, 355 and 340 μ L maximum well volumes, respectively
- 384 well: Square round well top design with flat or conical well bottoms having 152 and 145 μ L maximum well volumes, respectively
- Sterile and pigmented versions

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Bottom Style	Chimney Style	Color	Sterile	With Lid	Pack Qty	Case Qty
655201	96 well	Flat	Yes	Clear	No	No	10	100
655203	96 well	Flat	Yes	Red	No	No	10	100
655204	96 well	Flat	Yes	Blue	No	No	10	100
655205	96 well	Flat	Yes	Green	No	No	10	100
655206	96 well	Flat	Yes	Yellow	No	No	10	100
655209	96 well	Flat	Yes	Black	No	No	10	100
655261	96 well	Flat	Yes	Clear	Yes	No	10	100
650201	96 well	Round	Yes	Clear	No	No	10	100
650203	96 well	Round	Yes	Red	No	No	10	100
650204	96 well	Round	Yes	Blue	No	No	10	100
650205	96 well	Round	Yes	Green	No	No	10	100
650206	96 well	Round	Yes	Yellow	No	No	10	100
650207	96 well	Round	Yes	White	No	No	10	100
650209	96 well	Round	Yes	Black	No	No	10	100
650261	96 well	Round	Yes	Clear	Yes	No	10	100
651201	96 well	Conical	Yes	Clear	No	No	10	100
651203	96 well	Conical	Yes	Red	No	No	10	100
651204	96 well	Conical	Yes	Blue	No	No	10	100
651205	96 well	Conical	Yes	Green	No	No	10	100
651206	96 well	Conical	Yes	Yellow	No	No	10	100
651209	96 well	Conical	Yes	Black	No	No	10	100
651261	96 well	Conical	Yes	Clear	Yes	No	10	100
781201	384 well	Flat	No	Clear	No	No	10	100
781209	384 well	Flat	No	Black	No	No	10	100
781207	384 well	Flat	No	White	No	No	10	100
781280	384 well	Conical	No	Clear	No	No	10	100
781281	384 well	Conical	No	Clear	Yes	No	10	100



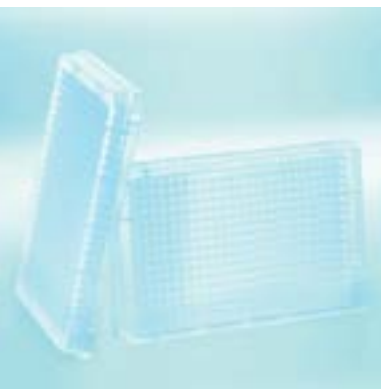
96, 384 and 1536 well MASTERBLOCK® Deep-Well Plates, Polypropylene

- Virgin polypropylene resin
- Biologically inert
- High chemical and thermal resistance (-196 °C to +121 °C)
- Manufactured in molds engineered specifically for polypropylene
- Conforms to ANSI/SBS - 1 (2004) Standard Footprint Dimensions to meet requirements for compatibility with equipment and robotics
- 96 well: 0.5, 1.0 and 2.0 mL versions having 780, 1200 and 2400 µL maximum well volumes, respectively
- 384 well: Square round well top design with conical (240 µL maximum volume) well bottoms
- 1536 well: Square round well top design with conical (18 µL maximum well volume) well bottoms
- Sterile and pigmented versions

Free of detectable DNase, RNase, human DNA
non-cytotoxic
non-pyrogenic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Volume Per Well (mL)	Well Top Shape	Well Bottom Shape	Sterile	Color	Chimney Style	With Lid	Pack Qty	Case Qty
786201	96 well	0.5 mL	Round	Conical	No	Clear	Yes	No	8	80
786261	96 well	0.5 mL	Round	Conical	Yes	Clear	Yes	No	1	80
780201	96 well	1.0 mL	Round	Round	No	Clear	Yes	No	1	50
780210	96 well	1.0 mL	Round	Round	No	Clear	Yes	No	50	50
780215	96 well	1.0 mL	Round	Round	No	Clear	Yes	No	5	50
780261	96 well	1.0 mL	Round	Round	Yes	Clear	Yes	No	1	50
780270	96 well	2.0 mL	Square	Conical	No	Clear	No	No	1	50
780271	96 well	2.0 mL	Square	Conical	Yes	Clear	No	No	1	50
780275	96 well	2.0 mL	Square	Conical	Yes	Green	No	No	1	50
780276	96 well	2.0 mL	Square	Conical	Yes	Yellow	No	No	1	50
780280	96 well	2.0 mL	Square	Conical	No	Clear	No	No	50	50
780285	96 well	2.0 mL	Square	Conical	No	Clear	No	No	5	50
780286	96 well	2.0 mL	Square	Conical	Yes	Clear	No	No	5	50
781270	384 well	240 µL	Square round	Conical	No	Clear	No	No	6	60
781271	384 well	240 µL	Square round	Conical	Yes	Clear	No	No	6	60
782270	1536 well	18 µL	Square round	Conical	No	Clear	No	No	15	60
782279	1536 well	18 µL	Square round	Conical	No	Black	No	No	15	60



384 Deep-Well Small Volume™ Microplates Polypropylene

- Standardized plate geometry (conform to ANSI/SBS 1-2004)
- Large working volume from 1 µL to 90 µL (107 µL maximum volume)
- Dead volume below 1 µL
- Focused liquid samples
- No loss of valuable compounds
- White and black versions are available on request

Free of detectable DNase, RNase, human DNA
non-pyrogenic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Bottom Style	Chimney Style	Color	Sterile	With Lid	Pack Qty	Case Qty
784201	384 Deep Well Small Vol	Conical/Flat	No	Clear	No	No	10	100
784207*	384 Deep Well Small Vol	Conical/Flat	No	White	No	No	10	100
784209	384 Deep Well Small Vol	Conical/Flat	No	Black	No	No	10	100
784261	384 Deep Well Small Vol	Conical/Flat	No	Clear	No	Yes	10	100

*Minimum order quantities apply.

Sapphire PCR Consumables

PCR At Its Best



- Manufactured out of medical-grade polypropylene with interfering additives
- Thin-walled for efficient heat transfer during amplification
- Free of detectable DNase, RNase and endotoxins
- Comprehensive thermal cycler compatibility
- Innovative NEW ergonomic 8-strip tubes/caps improve sample handling
- Innovative NEW “Rigid” style 96-well PCR microplate is ideal for automated PCR assembly
- New microplates expand our offering for ABI and Roche cyclers
- Innovative NEW 8-strip tubes with attached caps improve sample handling

Sapphire PCR Tubes (0.2 / 0.5 mL)

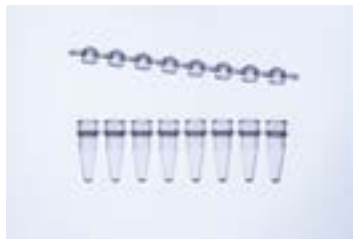
- With flat or domed cap or without cap
- Available in different colors
- Frosted tube cap for easy labeling
- Innovative NEW single tube with attached optically clear cap for real-time PCR

Free of detectable
DNase, RNase,
human DNA

PCR

GBO Cat. No.	Product Description	Volume	Lid/Cap Type	Color	Pack Qty	Case Qty
683281	Real-time <i>Sapphire</i> PCR Tube	0.2 mL	Optical	Clear	1000	10000
671201	<i>Sapphire</i> PCR Tube	0.2 mL	Domed	Clear	1000	10000
671273	<i>Sapphire</i> PCR Tube	0.2 mL	Domed	Red	1000	10000
671275	<i>Sapphire</i> PCR Tube	0.2 mL	Domed	Green	1000	10000
671276	<i>Sapphire</i> PCR Tube	0.2 mL	Domed	Yellow	1000	10000
671277	<i>Sapphire</i> PCR Tube	0.2 mL	Domed	Violet	1000	10000
683201	<i>Sapphire</i> PCR Tube	0.2 mL	Flat	Clear	1000	10000
683271	<i>Sapphire</i> PCR Tube	0.2 mL	Flat	Assorted	1000	10000
683273	<i>Sapphire</i> PCR Tube	0.2 mL	Flat	Red	1000	10000
683274	<i>Sapphire</i> PCR Tube	0.2 mL	Flat	Blue	1000	10000
683275	<i>Sapphire</i> PCR Tube	0.2 mL	Flat	Green	1000	10000
683276	<i>Sapphire</i> PCR Tube	0.2 mL	Flat	Yellow	1000	10000
683277	<i>Sapphire</i> PCR Tube	0.2 mL	Flat	Violet	1000	10000
684201	<i>Sapphire</i> PCR Tube	0.2 mL	No Lid	Clear	1000	10000
682201	<i>Sapphire</i> PCR Tube	0.5 mL	Flat	Clear	1000	10000
682273	<i>Sapphire</i> PCR Tube	0.5 mL	Flat	Red	1000	10000
682274	<i>Sapphire</i> PCR Tube	0.5 mL	Flat	Blue	1000	10000
682275	<i>Sapphire</i> PCR Tube	0.5 mL	Flat	Green	1000	10000
682276	<i>Sapphire</i> PCR Tube	0.5 mL	Flat	Yellow	1000	10000
682277	<i>Sapphire</i> PCR Tube	0.5 mL	Flat	Violet	1000	10000
682281	<i>Sapphire</i> PCR Tube	0.5 mL	Flat	Assorted	1000	10000

See page 52 for compatible small laboratory equipment.



Strip Tubes & Caps

- Available in different colors
- Comprehensive thermal cycler compatibility
- Tubes and cap sold separately
- Flat ultra-clear 8-cap strips for Real-Time and Quantitative PCR

Free of detectable DNase, RNase, human DNA PCR

GBO Cat. No.	Description	Volume	Lid/Cap Type	Color	Pack Qty	Case Qty
PCR Strip Tubes						
673210	Sapphire PCR Strip Tubes	0.2 mL	-	Clear	125	1250
673271	Sapphire PCR Strip Tubes	0.2 mL	-	Red	125	1250
673273	Sapphire PCR Strip Tubes	0.2 mL	-	Blue	125	1250
673274	Sapphire PCR Strip Tubes	0.2 mL	-	Green	125	1250
673275	Sapphire PCR Strip Tubes	0.2 mL	-	Yellow	125	1250
673276	Sapphire PCR Strip Tubes	0.2 mL	-	Violet	125	1250
673277	Sapphire PCR Strip Tubes	0.2 mL	-	Assorted	125	1250
PCR Strip Caps						
373250	Real Time Sapphire PCR Strip Caps	-	Optical	Clear	125	1250
373270	Sapphire PCR Strip Caps	-	Domed	Clear	125	1250
373273	Sapphire PCR Strip Caps	-	Domed	Red	125	1250
373274	Sapphire PCR Strip Caps	-	Domed	Blue	125	1250
373275	Sapphire PCR Strip Caps	-	Domed	Green	125	1250
373276	Sapphire PCR Strip Caps	-	Domed	Yellow	125	1250
373277	Sapphire PCR Strip Caps	-	Domed	Violet	125	1250
373281	Sapphire PCR Strip Caps	-	Domed	Assorted	125	1250



Strip Tubes & Caps - Combo Packs

- Tubes and caps sold together
- Comprehensive thermal cycler compatibility
- Flat ultra-clear caps for Real-Time and Quantitative PCR

Free of detectable DNase, RNase, human DNA PCR

GBO Cat. No.	Description	Volume	Color	Pack Qty	Case Qty
671241	COMBO Sapphire Real Time PCR Strip Tubes & Strip Caps, Standard Profile	0.2 mL	White	125	1250
673280	COMBO Sapphire Real Time PCR Strip Tubes & Strip Caps, Standard Profile	0.2 mL	Clear	125	1250
673281	COMBO Sapphire Real Time PCR Strip Tubes & Strip Caps, Low Profile	0.1 mL	Clear	125	1250
673282	COMBO Sapphire Real Time PCR Strip Tubes & Strip Caps, Low Profile	0.1 mL	White	125	1250



8-Tube Strips with Individually Attached Cap Strips

- Ultrathin walled tubes
- Caps close at an angle
- Optically-clear flat caps for Real-Time
- Available in standard, white or low profile
- Available in 0.1 mL and 0.2 mL

Free of detectable DNase, RNase, human DNA PCR

GBO Cat. No.	Description	Volume	Lid/Cap Type	Color	Pack Qty	Case Qty
608281	Sapphire PCR Strip Tubes	0.2 mL	Attached Optical Cap	Clear	120	1200
671221	Sapphire PCR Strip Tubes	0.1mL	Attached Optical Cap	Clear	120	1200
671231	Sapphire PCR Strip Tubes	0.2 mL	Attached Optical Cap	White	120	1200
673285	Sapphire PCR Strip Tubes	0.1mL	Attached Optical Cap	White	120	1200



8-Tube Strips with Attached Cap Strip

- Ultrathin walled tubes
- Full strip of caps attached at one end
- Optically-clear flat caps for Real-Time and Quantitative PCR
- Available in 0.2 mL

Free of detectable
DNase, RNase,
human DNA

PCR

GBO Cat. No.	Description	Volume	Lid/Cap Type	Color	Pack Qty	Case Qty
608201	Sapphire PCR Strip Tubes	0.2 mL	Attached optical cap strip	Clear	125	1250



Breakable 8-Tube Strips with Individually Attached Caps

- Ultrathin walled tubes
- Easy to break-apart for lower sample quantities
- Caps close at an angle
- Available with optically clear flat cap or dome cap
- Available in 0.2 mL

Free of detectable
DNase, RNase,
human DNA

PCR

GBO Cat. No.	Description	Volume	Lid/Cap Type	Color	Pack Qty	Case Qty
673283	Sapphire PCR Breakable Strips	0.2 mL	Attached Dome Cap	Clear	120	1200
673284	Sapphire PCR Breakable Strips	0.2 mL	Attached Optical Cap	Clear	120	1200



Ergonomic 8-Tube Strips with Strip Caps

- Ultrathin walled tubes
- Greatly improved cap closure ergonomics
- High alphanumeric visibility for sample tracking
- Ergonomic caps are available separately
- Available in 0.2 mL

Free of detectable
DNase, RNase,
human DNA

PCR

GBO Cat. No.	Description	Volume	Lid/Cap Type	Color	Pack Qty	Case Qty
373292	Sapphire PCR Flat Strip Caps	0.2 mL	Flat/Frosted	Clear	120	2400
373293	Sapphire PCR Flat Strip Caps	0.2 mL	Optical/Clear	Clear	120	2400
673286	COMBO Sapphire PCR Strip Tubes and Caps	0.2 mL	Flat/Frosted	Clear	120	2400
673287	COMBO Sapphire PCR Strip Tubes and Caps	0.2 mL	Optical/Clear	Clear	120	2400




PCR Microplates

High quality 96 and 384 well PCR microplates for ultra high throughput DNA analysis. Innovative manufacturing for uniform wall thickness and tight dimensional tolerances provide fast, consistent results.

- 96 well and 384 well formats
- Full, partial and non-skirted
- Ultra-thin polypropylene for optimal heat transfer
- Highly visible alphanumeric
- Compatible with variety of instruments, including ABI and LightCycler® (compatibility chart available – contact your Account Manager)

Free of detectable DNase, RNase, human DNA non-pyrogenic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Material	Color	Format	With Lid	Pack Qty	Case Qty
Standard							
652201	96 well	PP	Clear	No skirt	No	10	100
652210	96 well	PP	Clear	No skirt, Low profile	No	10	100
652250	96 well	PP	Clear	No skirt	No	10	100
652270	96 well	PP	Clear	Full skirt	No	10	100
785201	384 well	PP	Clear	Full skirt	No	15	60
785207	384 well	PP	White	Full skirt	No	15	60
Rigid							
652230	96 well	Proprietary	Clear	Full skirt	No	20	400
652230P	96 well	Proprietary	Clear	Full skirt	No	10	20
652235	96 well	Proprietary	Clear	Half skirt	No	20	400
652235P	96 well	Proprietary	Clear	Half skirt	No	10	20
ABI							
652240	96 well	PP	Clear	Half skirt, ABI "Fast" design	No	10	100
652260	96 well	PP	Clear	Half skirt	No	10	100
652290	96 well	PP	Clear	Half skirt	No	10	100
785290	384 well	PP	Clear	Full skirt	No	15	60
LightCycler							
652285	96 well	PP	Clear	Half skirt	No	10	100
669285	96 well	PP	White	Full skirt	No	10	100
785235	384 well	PP	White	Full skirt	No	10	100
785286	384 well	PP	Clear	Full skirt	No	10	100



UV-Star® 96, 96 Half Area and 384 well Microplates

- Microplates designed and optimized for absorbance readings down to 230 nm
- Ideal for measurements of DNA / RNA and protein concentrations at 260 and 280 nm, respectively
- 135 µm film bottoms ensure exceptionally low backgrounds for more accurate measurements
- 100% Transmittance at preferred wavelengths
- Innovative molding technique eliminates possibility of film detachment
- Suitable for storage down to -80°C; DMSO resistant
- Expensive and fragile quartz glass microplates are no longer required for routine laboratory work

Free of detectable DNase, RNase, human DNA non-pyrogenic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Color	Format	TC	Sterile	With Lid	Pack Qty	Case Qty
655801	96 well	Clear	Chimney	No	No	No	10	40
655865	96 well	Clear	Chimney	Yes	Yes	Yes	8	32
655809	96 well	Black/µClear®	Chimney	No	No	No	10	40
675801	96 well	Clear	Half-Area	No	No	No	10	40
781801	384 well	Clear	Standard	No	No	No	10	40
781865	384 well	Clear	Standard	Yes	Yes	No	10	40
788876	384 well	Black/µClear®	Small Volume LoBase	No	No	No	10	80
788890	384 well	Black/µClear®	Small Volume LoBase	Yes	Yes	No	10	80



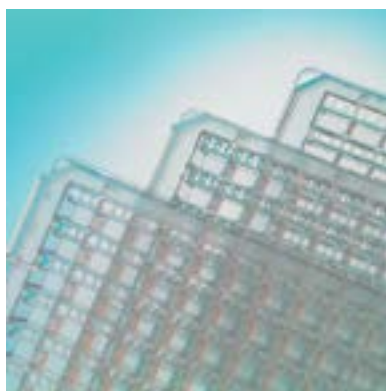
Storage Plates for Acoustic Liquid Handling Cycloolefin (CO) and polypropylene (PP)

- 96, 384, 1536 well formats
- Manufactured under strict production specifications with low tolerances
- Excellent for automation
- Individual barcoding on request
- May be used in both compound storage and screening assay applications
- Specific products available with deionized, antistatic packaging

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Well Density	Well Bottom	Plate Style	Format	Material	Plate Color	TC	Sterile	With Lid	Pack Qty	Case Qty
675801	96 well	Flat	Half Area	Standard	CO	Clear	No	No	No	10	40
655801	96 well	Flat	Chimney	Standard	CO	Clear	No	No	No	10	40
655865	96 well	Flat	Chimney	Standard	CO	Clear	Yes	Yes	Yes	8	32
781201-906	384 well	Flat	Standard	Standard	PP	Clear	No	No	No	10	100
781265	384 well	Flat	Standard	TC	PP	Clear	Yes	No	No	10	100
781801	384 well	Flat	Standard	Standard	CO	Clear	No	No	No	10	40
788876	384 well	Flat	Small Volume	LoBase	CO	Black/μClear®	Yes	No	No	10	80
788890	384 well	Flat	Small Volume	LoBase	CO	Black/μClear®	Yes	Yes	No	10	80
781865	384 well	Flat	Standard	HiBase	CO	Clear	Yes	Yes	No	10	40
793855	384 well	Flat	Small Volume	HiBase	CO	Clear	No	No	No	15	60
793865	1536 well	Flat	Standard	HiBase	CO	Clear	Yes	Yes	No	16	60
782855	1536 well	Flat	Standard	HiBase	CO	Clear	No	No	No	15	60
792870	1536 well	Flat	Low Evaporation	HiBase	CO	Clear	No	No	No	15	60
782865	1536 well	Flat	Standard	HiBase	CO	Clear	Yes	Yes	No	15	60
792891		Cycloolefin Lid for 792870			CO	Clear	No	No	NA	30	120



CrystalQuick™ – High Throughput Protein Crystallization

- CrystalQuick™ plates for sitting drop protein crystallization with up to 288 sample wells possible
- CrystalDrop™ Lids for hanging drop protein crystallization with 192 sample wells
- Low birefringent (LBR) options for superior optical properties with polarized light
- Hydrophobic surface treatment ideal for membrane proteins
- Highly transparent VIEWseal™ film for precise optical visualization
- Automation friendly

 All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Description	Material	Sample Well Profile	Sample Well Bottom	Sample Wells	Max. Well Volume (μL)	Volume per Reservoir	Height (mm)	Treatment	Pack Qty	Case Qty
609101	CrystalQuick™	PS	Square	Flat	3	4.1	320	14.4	–	10	40
609801	CrystalQuick™	LBR	Square	Flat	3	4.1	320	14.4	–	10	40
609120	CrystalQuick™	PS	Round	Concave	3	1.9	320	14.4	–	10	40
609820	CrystalQuick™	LBR	Round	Concave	3	1.9	320	14.4	–	10	40
609171	CrystalQuick™ LP	PS	Square	Flat	1	3.9	140	8.0	–	20	80
609871	CrystalQuick™ LP	LBR	Square	Flat	1	3.9	140	8.0	–	20	80
609130	CrystalQuick™ Plus	PS	Square	Flat	3	4.1	320	14.4	Hydrophobic	10	40
609830	CrystalQuick™ Plus	LBR	Square	Flat	3	4.1	320	14.4	Hydrophobic	10	40
609180	CrystalQuick™ Plus LP	PS	Square	Flat	1	3.9	140	8.0	Hydrophobic	20	80
676070	VIEWseal™ Pressure Sensitive Microplate Sealer, Optically Clear	–	–	–	–	–	–	–	–	100	100



Microbatch Under Oil Protein Crystallization

60 and 72 well Terasaki Plates

Terasaki plates are widely used for microbatch crystallization. The crystallization drop is localized centrally as a result of the conical well geometry, and the flat well bottom makes for optimal monitoring. The rim of the Terasaki plates makes it possible to fill all of the wells with oil at the same time. As a result of the small external dimensions and the low profile of the Terasaki plates, the space required for storage is relatively small. Terasaki plates are supplied with a fitting lid.

The plates are also supplied with surface treatment in the Terasaki plate section. The treatment of the plates influences the sticking of the crystallization drop to the bottom of the well.

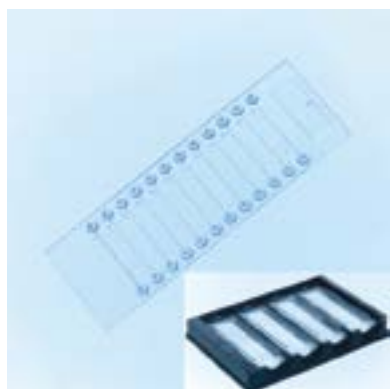
GBO Cat. No.	Description	Material	Format	Plate Color	Well Profile	Well Bottom	Well Diameter (mm)	Max. Well Volume (mL)	Height (mm)	Pack Qty	Case Qty
653102	Terasaki Plate	PS	60 well	Clear	Conical	Flat	1.30	11.5	10.0	10	580
654102	Terasaki Plate	PS	72 well	Clear	Conical	Flat	1.30	11.5	10.0	10	270



ComboPlate™ Protein Crystallization

- Universal, automation friendly 24 well ComboPlate™ for protein crystallization
- Flattened, raised ring around each well reduces the risk of cross-contamination and optimizes use with coverslips
- CrystalBridge™ fit exactly into the wells of the ComboPlate™ for sitting drop applications
- Siliconized glass coverslips available for ComboPlate™ (18 mm) and Linbro plates (22 mm)
- Conforms to ANSI/SBS – 1 (2004) Standard Footprint Dimensions to meet requirements for compatibility with equipment and robotics

GBO Cat. No.	Description	Material	Format	Treatment	Well Bottom	Well Diameter	Max. Well Volume (µL)	Height (mm)	Pack Qty	Case Qty
662145	CrystalBridge	PS	1 well	–	Concave	4.6	45	13	250	250
501870	Cover Slip	Glass	Round	Siliconized	Flat	18	–	0.2	100	1000
503850	Cover Slip	Glass	Round	Siliconized	Flat	22	–	.55	25	1000
503870	Cover Slip	Glass	Round	Siliconized	Flat	22	–	0.2	100	1000



CrystalSlide™

Plastic Micro-Channel Platform for Counter Diffusion Crystallography

- Counter Diffusion Crystallography within a standard microscope slide format
- Design and material optical properties renders excellent suitability for *in-situ* X-ray data collection, structure determination and crystal analysis
- Low birefringent, UV-light transmissive
- X-ray transmissive
- 12 channels per slide
- Channel dimensions 0.1 mm, height 0.1 mm, length 20 mm
- Channel volume 200 uL

GBO Cat. No.	Description	Pack Qty	Case Qty
444820	CrystalSlide, 12 Micro-Channel Platform for Counter Diffusion Crystallography*	4	20
On request	Slide holder	1	1

* now with peelable film bottom for ease of crystal harvesting from channels



Plate Sealers

- EASYseal™ – adhesive sealer for everyday laboratory requirements: coverage/storage; protection against evaporation and contamination
- VIEWseal™ – highly transparent film for precise optical measurements: ideally suited for protein crystallography and Real-Time PCR
- SILVERseal™ – pierceable aluminum foil coated with an acrylate adhesive: ideally suited for PCR applications and storage of sample material and active agents
- AMPLIseal™ – highly transparent film with minimal autofluorescence: ideally suited for Real Time PCR
- Non-sterile

Free of detectable
DNase, RNase,
human DNA
non-pyrogenic

non-
cytotoxic

GBO Cat. No.	Product Name	Non-Tacky Adhesive	Optically Clear	Pierceable	Color	Pack Qty	Case Qty
676001	EASYseal	No	Yes	No	Clear	100	100
676070	VIEWseal	Yes	Yes	No	Clear	100	100
676090	SILVERseal	No	No	Yes	Silver	100	100
676040	AMPLIseal	No	No	No	Clear	100	100

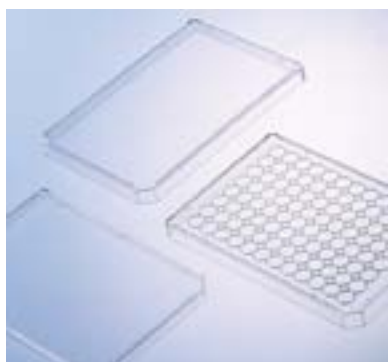


Plate Lids Polystyrene

- Standard Profile lid without condensation rings mainly used for non TC-treated 96 well microplates
- Standard Profile lid with condensation rings recommended insert for TC-treated 96 well microplates in cell culture applications
- Low Profile Lid recommended for 384 well standard microplates
- Ultra Low Profile Lid recommended for 384 well LoBase Small Volume™ and 1536 well microplates
- Standard Profile and Low Profile Lid have corner notches for proper orientation
- Ultra Low Profile Lid has a universal design with no corner notches
- Black opaque lids for light sensitive assay protection
- Wide variety of packaging options

Free of detectable DNase, RNase, human DNA, non-pyrogenic non-cytotoxic

All Greiner Bio-One plates can be barcoded to your specifications

GBO Cat. No.	Skirt Format	Condensation Rings	Material	Sterile	Color	Pack Qty	Case Qty
656101	Standard	No	PS	No	Clear	1	100
656197	Standard	No	PS	No	Clear	10	150
656161	Standard	No	PS	Yes	Clear	1	100
656196	Standard	No	PS	Yes	Clear	10	100
656170	Standard	Yes	PS	No	Clear	1	100
656178	Standard	Yes	PS	No	Clear	10	150
656171	Standard	Yes	PS	Yes	Clear	1	100
656176	Standard	Yes	PS	Yes	Clear	10	150
656172	Standard	Yes	PS	Yes	Clear	5	480
656190	Low Profile	No	PS	No	Clear	20	200
656191	Low Profile	No	PS	Yes	Clear	20	200
656199	Low Profile	No	PS	No	Black	1	50
691101	Ultra Low Profile	No	PS	No	Clear	5	100
691161	Ultra Low Profile	No	PS	Yes	Clear	5	100
792891	Ultra Low Profile	No	CO	No	Clear	30	120
792891-ST	Ultra Low Profile	No	CO	Yes	Clear	30	120



Cap Mats

- Flexible silicon or robust EVA (ethyl vinyl acetate)
- DMSO resistant
- High thermal resistance (EVA withstands -20° C to +60° C; silicone withstands -60° C to +121° C)
- Alphanumerically labeled to ensure correct fitting and orientation
- Round well and square well formats
- 96 well and 384 well formats

GBO Cat. No.	Fits Well Density	Fits Well Shape	Material	Sterile	Color	Pack Qty	Case Qty
381070	96 well	Round	EVA	No	Clear	10	50
381061	96 well	Round	EVA	Yes	Clear	1	50
381080	96 well	Square	EVA	No	Clear	10	50
381081	96 well	Square	EVA	Yes	Clear	1	50



Disposable Inoculation Loops / Needles

- Sterilized by irradiation
- Needles ideal for picking single colonies
- Flexible loops for easier collection and inoculation
- Color coding for volume differentiation
- Single and bulk packaging options

GBO Cat. No.	Description	Length [mm]	Color	Sterile	Pack Qty	Case Qty
	Inoculation Needle					
731180	Inoculation needle	200	Yellow	Yes	50	2000
731181	Inoculation needle	200	Yellow	Yes	1	600
731185	Inoculation needle	200	Yellow	Yes	10	3000
	Inoculation Loop					
731101	Inoculation loop	1	White	Yes	50	2000
731161	Inoculation loop	1	White	Yes	1	600
731165	Inoculation loop	1	White	Yes	10	3000
731170	Inoculation loop	10	White	Yes	50	2000
731171	Inoculation loop	10	White	Yes	1	600
731175	Inoculation loop	10	White	Yes	10	3000



Swab Tubes / Swabs

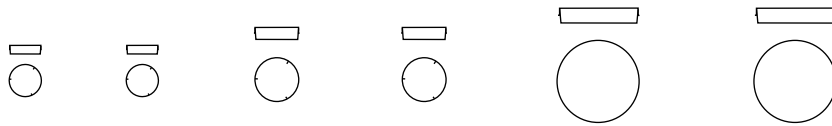
- Suitable for collection and transport of non-human bacteriological and cytological samples
- Sterilized by irradiation
- Swab tubes are made of polystyrene
- Swabs are made of cotton

GBO Cat. No.	Description	Width [mm] x Height [mm]	Sterile	Pack Qty	Case Qty
421161	Swab tube	16 x 152	Yes	-	1000
421180	Swab tube	16 x 152	Yes	1	700
421084	Swab	145	Yes	1	1400

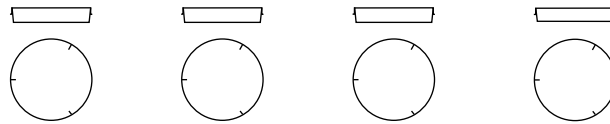


Petri Dishes

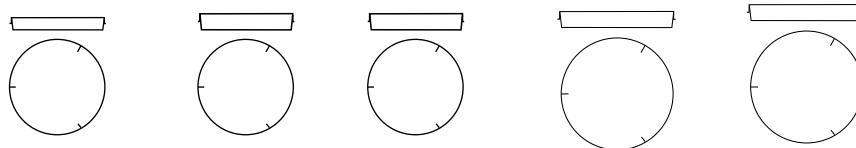
- Available in various sizes
- Easy stacking
- Vented for better gas exchange and non-vented for long incubation period
- Heavy design for better heat resistance using hot agar
- Sterile, irradiated options are also available
- Manufactured from crystal clear polystyrene for optimal analysis by microscopy



GBO Cat. No.	627102	627161	628102	628161	632161	632180
Description	Petri Dish	Petri Dish	Petri Dish	Petri Dish	Petri Dish	Petri Dish
Width [mm] x height [mm]	35 x 10	35 x 10	60 x 15	60 x 15	94 x 16	94 x 16
Vents	Yes	Yes	Yes	Yes	No	No
Heavy Design	No	No	No	No	Yes	No
Sterile	No	Yes	No	Yes	Yes	No
Quantity per pack/case	10/740	10/740	20/600	20/600	20/480	20/480



GBO Cat. No.	633161	633180	633181	633179
Description	Petri Dish	Petri Dish	Petri Dish	Petri Dish
Width [mm] x height [mm]	94 x 16	94 x 16	94 x 16	94 x 15
Vents	Yes	Yes	Yes	Yes
Heavy Design	Yes	No	No	No
Sterile	Yes	No	Yes	Yes
Quantity per pack/case	20/480	20/480	20/480	20/480



GBO Cat. No.	663161	664102	664161	639102	639161
Description	Petri Dish	Petri Dish	Petri Dish	Petri Dish	Petri Dish
Width [mm] x height [mm]	100 x 15	100 x 20	100 x 20	145 x 20	145 x 20
Vents	Yes	Yes	Yes	Yes	Yes
Heavy Design	Yes	Yes	No	No	No
Sterile	Yes	No	Yes	No	Yes
Quantity per pack/case	20/420	15/360	15/360	15/120	15/120



Petri Dishes – Special Models / Germ Count Dish / Microplate

- Manufactured from crystal clear and heat resistant polystyrene for optimal analysis by microscopy



GBO Cat. No.	635102	635161	637102	637161	633175
Description	Petri Dish	Petri Dish	Petri Dish	Petri Dish	germ count dish
Special feature	2 compartments	2 compartments	3 compartments	3 compartments	graduated
Width [mm] x height [mm]	94 x 15	94 x 15	94 x 15	94 x 15	94 x 16
Volume/well [mL]	20	20	12	12	-
Vents	Yes	Yes	Yes	Yes	No
Sterile	No	Yes	No	Yes	No
Quantity per pack/case	20/480	20/480	20/480	20/480	20/480



Contact Dishes / Petri Dish Square CellStar® OneWell™ Plate

- CELLSTAR® OneWell Plate™ for Cell Culture Applications (see page 22)
- Manufactured from crystal clear and heat resistant polystyrene



GBO Cat. No.	629161	629180	688102	670102
Description	Contact Dish	Contact Dish	Petri Dish	OneWell Plate™
Special feature	graduated bottom	graduated bottom	square	microplate format
Width [mm] x height [mm]	65 x 15	65 x 15	(120 x 120) x 17	(127.8 x 85.5) x 14.4
Vents	No	Yes	Yes	Yes
Sterile	Yes	Yes	No	No
Quantity per pack/case	20/600	20/600	10/240	8/32



Vortex Mixer

GBO Cat. No. 844050

- Powerful motor for INSTANT vortexing of up to 50 mL tubes
- Dynamic balance system to minimize noise and vibration
- Touch or continuous operation
- Variable speed control from 200 to 3200 RPM
- Compatible with all Greiner Bio-One tubes
- 2 year warranty



Mini Block Heater

GBO Cat. No. 848050

- Simple touchpad operation
- Easy-to-read digital display
- Compact, fits in the palm of your hand
- Exchangeable blocks for tubes from 0.2 to 50 mL
- 2 year warranty



Sapphire MaxiPette

GBO Cat. No. 847050

- Ergonomic design for easy pipetting
- Variable speed control
- Cordless and rechargeable
- Up to eight hours of continuous operation
- Compatible with Greiner Bio-One serological pipettes
- 2 year warranty



Mini Centrifuge

GBO Cat. No. 843050

- Ideal for quick spin downs of microtubes and PCR tubes Rotor instantly reaches 6,000 RPM
- Storage compartment for PCR tube rotor
- Decelerates in just one second
- Compatible with Greiner Bio-One PCR and reaction tubes
- 2 year warranty



Mini Vortex Mixer

GBO Cat. No. 845050

- Powerful, quiet vortexing for tubes up to 50 mL
- Instant pressure-activated operation
- Compact, fits in the palm of your hand
- Compatible with all Greiner Bio-One tubes
- 2 year warranty



Microplate Centrifuge

GBO Cat. No. 846050

- Quickly spins down droplets in microplates
- Unique rotor design holds 2 plates and prevents spillage
- 50% smaller than traditional centrifuges
- G-force of over 400 x g
- Compatible with most Greiner Bio-One microplates
- 2 year warranty

Greiner Bio-One Product Compatibility Chart



GBO Part No./Description	Centrifuge Tubes	Reaction Tubes	PCR Strip Tubes	0.2 and 0.5 mL Tubes	Microplates (except MASTERBLOCK™)	Serological Pipettes
844050/ Vortex Mixer	✓	✓	✓	✓		
848050/ Mini Block Heater	(See chart below for detailed compatibility information)					
843050/ Mini Centrifuge		✓	✓	✓		
846050/ Microplate Centrifuge					✓	
845050/ Mini Vortex Mixer	✓	✓	✓	✓		
847050/ Sapphire Maxi Pette						✓

Greiner Bio-One Compatibility Chart for Block Heater Accessories

GBO Part No.	545916	545923	545902	545913	545921	545915	545950
No. of Tubes per insert	15X	15X	40X	15X	15X	14X	2X
1mL Cryo.s™					✓		
2mL Cryo.s™					✓		
4mL Cryo.s™				✓			
5mL Cryo.s™				✓			
1.5mL Reaction Tube	✓	✓					
2 mL Reaction Tube		✓					
0.5 mL PCR Tube	✓	✓					
0.2 mL PCR Tube			✓				
1x8 PCR Tube Strip			✓				
15 mL Conical Tube						✓	
50 mL Conical Tube							✓
4 mL, 12x66 mm Tube				✓			
5 mL, 12x75 mm Tube			✓				
4.5 mL, 12x75 mm Tube			✓				
12 mL, 16x100 mm Tube					✓		
12 mL, 17x100 mm Tube					✓		
20 mL, 16x152 mm Tube					✓		
14 mL, 17x95 mm Tube					✓		
14 mL, 18x95 mm Tube					✓		



VACUETTE® Safety Products, Needles, Accessories & Equipment

More than 1,000 healthcare workers are injured with a needle or sharp device in the hospital setting every day¹. Risks of contracting Hepatitis B from a contaminated sharps injury range from 6% to 30% for workers susceptible to HBV infection².

OSHA's Bloodborne Pathogens Standard requires employers to protect healthcare workers from exposure to HIV and hepatitis B and C. One requirement is that engineering controls be used; for example, implement use of safety devices to eliminate or minimize employee exposure.

How a device is evaluated by a facility varies. However, there must be a mechanism in place to obtain input from workers using these safety devices regarding needs and preferences.

Factors to consider might include:

- Functional reliability of safety feature
- Intuitiveness/ease of use
- Positioning of hands behind sharp
- Indication of appropriate activation
- Permanent coverage of the sharp
- Compatibility with good phlebotomy technique
- Patient and employee safety

The VACUETTE® safety product assortment provides the necessary safety-engineered controls as recommended by OSHA and allows the healthcare worker to choose a safe device for collection.

VACUETTE® Safety Blood Collection Set features in-vein activation of the safety shield as well as an audible 'click' to signify that the shield has been activated correctly.

VanishPoint® Blood Collection Set provides the user with a one-handed automatic safety feature that is activated in-vein.

QUICKSHIELD Safety Tube Holder with rotational safety shield allows the user to position the shield anywhere on the holder. Also available as a pre-assembled product, the QUICKSHIELD Complete PLUS, which includes a pre-assembled VISIO PLUS needle and QUICKSHIELD safety holder.

VISIO PLUS needle provides 'flash' confirmation of successful venipuncture.

Download the free **APP/ause Virtual Trainer** from the App or Google Play store for additional training on the proper use of the VACUETTE® Safety Blood Collection Set.

¹ Centers for Disease Control and Prevention, Sharps Injury Prevention Workbook: Information About the workbook, Page 1. www.cdc.gov/sharpsafety/pdf/workbookcomplete.pdf. Accessed 4-1-09.

² Centers for Disease Control and Prevention. (2003). Exposure to Blood, What Healthcare Personnel Need to Know. www.cdc.gov/ncidod/dhqp/pdf/bbp/Exp_to_Blood.pdf. Accessed 4-1-09.



Safety Blood Collection Sets – with and without Luer Adapter

- Designed to activate while the needle is being removed from the vein for added protection
- FDA cleared for short term infusion
- Audible ‘click’ can be heard when the safety shield is activated properly

GBO Cat. No.	Size	○ Wing Color	Description	Box Qty	Case Qty
VACUETTE® Safety Blood Collection Sets (Needle length is 3/4")					
450091	21G x 7.5"	● Green	Safety Blood Collection Set without Luer Adapter	50	1000
450092	23G x 7.5"	● Blue	Safety Blood Collection Set without Luer Adapter	50	1000
450090	25G x 7.5"	● Orange	Safety Blood Collection Set without Luer Adapter	50	1000
450083	21G x 4"	● Green	Safety Blood Collection Set with Luer Adapter	50	1000
450084	23G x 4"	● Blue	Safety Blood Collection Set with Luer Adapter	50	1000
450081	21G x 7.5"	● Green	Safety Blood Collection Set with Luer Adapter	50	1000
450082	23G x 7.5"	● Blue	Safety Blood Collection Set with Luer Adapter	50	1000
450095	21G x 12"	● Green	Safety Blood Collection Set with Luer Adapter	50	1000
450096	23G x 12"	● Blue	Safety Blood Collection Set with Luer Adapter	50	1000
450099	25G x 12"	● Orange	Safety Blood Collection Set with Luer Adapter	50	1000



Safety Blood Collection Sets – with Holders

- Designed to activate while the needle is being removed from the vein for added protection
- Available with pre-attached holders for user convenience and to facilitate the collection process

GBO Cat. No.	Size	○ Wing Color	Description	Box Qty	Case Qty
VACUETTE® Safety Blood Collection Sets (Needle length is 3/4")					
450085	21G x 7.5"	● Green	Safety Blood Collection Set with Holder	24	240
450086	23G x 7.5"	● Blue	Safety Blood Collection Set with Holder	24	240
450160	21G X 12"	● Green	Safety Blood Collection Set with Holder	24	240
450161	23G x 12"	● Blue	Safety Blood Collection Set with Holder	24	240
450184	21G x 12"	● Green	Safety Blood Collection Set with Blood Culture Holder	24	240
450185	23G x 12"	● Blue	Safety Blood Collection Set with Blood Culture Holder	24	240



VACUETTE® Safety Blood Collection Set (Cat. #450091)



VACUETTE® Safety Blood Collection Set with Blood Culture Holder (Cat. #450184)



VanishPoint® Blood Collection Sets

- Automatic safety mechanism with one-handed activation of the trigger to virtually eliminate needle exposure
- Trigger is color-coded by needle gauge

GBO Cat. No.	Size	Wing Color	Description	Box Qty	Case Qty
VanishPoint® Blood Collection Sets (Needle length is 3/4")					
24011	25G x 7"	Orange	Safety Blood Collection Set with Luer Adapter	50	200
24021	23G x 7"	Deep Blue	Safety Blood Collection Set with Luer Adapter	50	200
24031	21G X 7"	Deep Green	Safety Blood Collection Set with Luer Adapter	50	200
24111	25G x 12"	Orange	Safety Blood Collection Set with Luer Adapter	50	200
24121	23G x 12"	Deep Blue	Safety Blood Collection Set with Luer Adapter	50	200
24131	21G x 12"	Deep Green	Safety Blood Collection Set with Luer Adapter	50	200



QUICKSHIELD Safety Tube Holders/ Blood Transfer Systems

- QUICKSHIELD Tube Holder safety shield rotates 360 degrees for easy positioning
- QUICKSHIELD Holder is available separately or as QUICKSHILED Complete Plus, assembled with a VISIO PLUS Needle, which provides a visual "flash" with successful venipuncture
- VACUETTE® Blood Transfer Unit complies with OSHA guidelines for the transfer of blood following a syringe draw
- The Holdex® Tube Holder is used for venous collections involving devices with a female luer port

GBO Cat. No.	Size	Description	Box Qty	Case Qty
VACUETTE® QUICKSHIELD				
450230		QUICKSHIELD Safety Tube Holder	50	1000
450235	21G x 1"	QUICKSHIELD Complete PLUS (w/ VISIO PLUS needle)	30	360
450239	21G x 1.5"	QUICKSHIELD Complete PLUS (w/ VISIO PLUS needle)	30	360
450226	22G x 1"	QUICKSHIELD Complete PLUS (w/ VISIO PLUS needle)	30	360
450228	22G x 1.5"	QUICKSHIELD Complete PLUS (w/ VISIO PLUS needle)	30	360
VACUETTE® Blood Transfer Systems				
450225		VACUETTE® Blood Transfer Unit	100	800
450241		Holdex® Tube Holder, Individually wrapped, sterile	100	800



QUICKSHIELD Complete PLUS
w/VISIO PLUS needle
(Cat. #450226, 450228, 450235, 450239)



VACUETTE® Blood Transfer Unit
(Cat. #450225)



Holdex® Tube Holder
(Cat. #450241)



Single Use Holders

- Compliant with OSHA guidelines
- Compatible with VACUETTE® Safety Blood Collection Sets and VACUETTE® Luer Adapters
- VACUETTE® Blood Culture Holder is compatible with most blood culture bottles and subsequent collection of samples with evacuated tubes can be accommodated without an adapter

GBO Cat. No.	Description	Box/Bag Qty	Case Qty
450181	Blood Culture Holder	40	320
450209	Short Standard Holder	100	2000



Blood Collection Needles / Luer Adapter

- Predominantly used for routine blood collection
- Single use only

GBO Cat. No.	Size	○ Cap Color	Description	Box Qty	Case Qty
Multi-Drawing Needles					
450047	18G x 1"	● Pink	Multi-Drawing Needle	100	2000
450048	18G x 1.5"	● Pink	Multi-Drawing Needle	100	2000
450073	20G x 1"	● Yellow	Multi-Drawing Needle	100	2000
450077	20G x 1.5"	● Yellow	Multi-Drawing Needle	100	2000
450072	21G x 1"	● Green	Multi-Drawing Needle	100	2000
450076	21G x 1.5"	● Green	Multi-Drawing Needle	100	2000
450071	22G x 1"	● Black	Multi-Drawing Needle	100	2000
450075	22G x 1.5"	● Black	Multi-Drawing Needle	100	2000
Luer Adapter					
450070			Luer Adapter	100	2000

VACUETTE® 20G, 21G & 22G Multi-Drawing Needles are recommended for use with QUICKSHIELD Safety Tube Holder. (Cat. # 450230)



Luer Adapter
(Cat. #450070)



VISIO PLUS Needles

- Provide visual “flash” confirmation of successful venipuncture

GBO Cat. No.	Size	○ Cap Color	Description	Box Qty	Case Qty
450042	21G x 1”	● Green	VISIO PLUS Multi-Drawing Needle	100	2000
450040	21G x 1.5”	● Green	VISIO PLUS Multi-Drawing Needle	100	2000
450043	22G x 1”	● Black	VISIO PLUS Multi-Drawing Needle	100	2000
450041	22G x 1.5”	● Black	VISIO PLUS Multi-Drawing Needle	100	2000

VACUETTE® VISIO PLUS 21G & 22G Multi-Drawing Needles are recommended for use with QUICKSHIELD Safety Tube Holder. (Cat. # 450230)



Single-Drawing Needles (for Veterinary use only)

- Used for routine blood collection
- Single-draw needles are for the collection of a single tube or syringe

GBO Cat. No.	Size	○ Cap Color	Description	Box Qty	Case Qty
450068	18G x 1”	● Pink	Single-Drawing Needle	100	2000
450069	18G x 1.5”	● Pink	Single-Drawing Needle	100	2000



VACUETTE® Blood Collection Tubes

STANDARD TUBE

VACUETTE® Tubes are injection-molded from polyethylene terephthalate (PET) - producing a highly transparent, virtually unbreakable blood collection tube.

Thick tube walls maintain the vacuum when subjected to variations in temperature.



All VACUETTE® blood collection tubes are sterile and latex free.

LOW VOLUME TUBE

VACUETTE® Low Volume Tubes are standard 13x75mm tubes with reduced draw volumes (1mL to 2.5 mL) to help prevent phlebotomy-induced incidence of hospital-acquired anemia.

COAGULATION TUBE

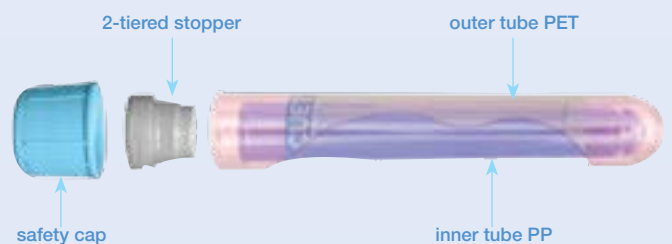
Greiner Bio-One developed the VACUETTE® “sandwich” (tube-within-a-tube) coagulation tube. This extremely complex, double-wall technology combines two varieties of plastic.

The inner tube is made of Polypropylene (PP):

PP prevents the gradual evaporation of the sodium citrate additive to maintain the correct blood-to-additive ratio.

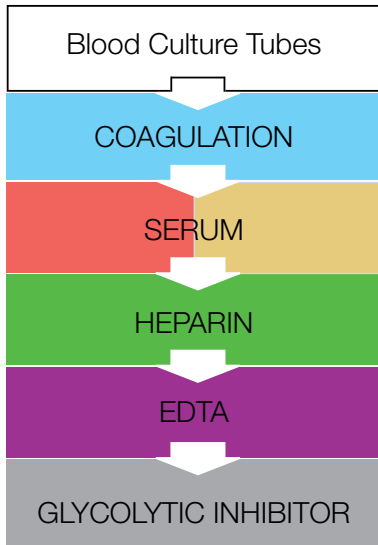
The outer tube is made of PET:

PET maintains vacuum for maximum shelf life.



Order of Draw

CLSI Recommended (GP41)*

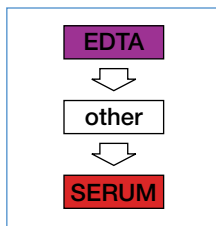


NOTE: Always follow facility protocol for Order of Draw.

If a winged blood collection set is used, the first tube in the series will be underfilled. Therefore, if a coagulation specimen is drawn first, it is recommended that a discard tube (a no additive or coagulation tube) be drawn prior to the patient tubes to ensure the proper anticoagulant-to-blood ratio.

Order of Draw for Capillary Collection

CLSI Recommended GP42*



Centrifugation Settings

Tube Type	Recommended g-force relative centrifugal force (rcf)	Recommended Time (Minutes)
VACUETTE® Serum Tubes (Clot Activator, No Additive)	Minimum 1500 g	10
VACUETTE® Serum Clot Activator w/ Gel Tubes	1800 g	10
VACUETTE® K ₂ EDTA w/ Gel Tubes	1800 - 2200 g	10
VACUETTE® Plasma Tubes (Lithium Heparin, Sodium Heparin, PO/NaF)	2000 - 3000 g	15
VACUETTE® Lithium Heparin w/ Gel Tubes	1800-2200 g	10-15
VACUETTE® Coagulation Tubes (Sodium Citrate)		
Platelet tests (PRP)	150 g	5
Routine tests (PPP)	1500 - 2000 g	10
Preparation for deep freeze plasma (PFP)	2500 - 3000 g	20

Reproduced with permission from CLSI. GP41-A7, Collection of Diagnostic Venous Blood Specimens; Approved Standard - Seventh Edition. GP42-A6, Procedures and Devices for the Collection of Diagnostic Capillary Blood Specimens; Approved Standard - Sixth Edition. Copies of the current editions may be obtained from Clinical and Laboratory Standards Institute, 950 West Valley Road, Suite 2500, Wayne, Pennsylvania 19087-1898, USA. Internet: www.clsi.org.

Specimen Handling

To achieve the proper mix of additive and blood, each tube must be gently inverted as it is removed from the holder following collection.

One complete inversion

Turn the filled tube upside down and return it to an upright position.

Repeat required number of times for each tube type.

Importance of Mixing

Insufficient or delayed mixing of serum tubes may result in delayed clotting.

Inadequate mixing of anticoagulant tubes may result in platelet clumping, clotting or incorrect test results.



1 Inversion



Serum

- Can be used for routine clinical chemistry, immunohematology, serology or immunology testing
- Coated with micronized silica particles which activate clotting when tubes are gently inverted
- Tubes available with a gel separator that will move to the serum-clot interface upon centrifugation
- FDA 510(k) cleared for therapeutic drug monitoring (TDM)

GBO Cat. No.	Blood Volume	Cap Color	Ring Color	Tube Size (mm)	Description	Rack Qty	Case Qty
454236	2 mL	Red	White	13 x 75	Clot Activator	50	1200
454204	4 mL	Red	Black	13 x 75	Clot Activator	50	1200
456089	6 mL	Red	Black	13 x 100	Clot Activator	50	1200
456048	6 mL	Red	Black	13 x 100	Clot Activator, Clear Label	50	1200
455092	9 mL	Red	Black	16 x 100	Clot Activator	50	1200
with Gel							
454243P	2.5 mL	Red	White	13 x 75	Clot Activator, Gel Separator	50	1200
454067P	3.5 mL	Red	Yellow	13 x 75	Clot Activator, Gel Separator	50	1200
454228P	3.5 mL	Gold	Gold	13 x 75	Clot Activator, Gel Separator	50	1200
456292P	4 mL	Red	Yellow	13 x 100	Clot Activator, Gel Separator	50	1200
456073P	5 mL	Red	Yellow	13 x 100	Clot Activator, Gel Separator	50	1200
456018P	5 mL	Gold	Gold	13 x 100	Clot Activator, Gel Separator	50	1200
455099P	7 mL	Red	Yellow	16 x 100	Clot Activator, Transport Gel Separator	50	1200
455071P	8 mL	Red	Yellow	16 x 100	Clot Activator, Gel Separator	50	1200
455010P	9 mL	Red	Yellow	16 x 100	Clot Activator, Gel Separator	50	1200



Serum No Additive



- Can be used for discard, immunohematology or viral marker testing
- These tubes contain no additives

GBO Cat. No.	Blood Volume	Cap Color	Ring Color	Tube Size (mm)	Description	Rack Qty	Case Qty
454241	3 mL	White	Black	13 x 75	No Additive	50	1200
456085	6 mL	White	Black	13 x 100	No Additive	50	1200
455001	9 mL	White	Black	16 x 100	No Additive	50	1200



Trace Elements

- Contains either sodium heparin or no additive
- May be used to test blood for the presence of trace elements
















GBO Cat. No.	Blood Volume	Cap Color	Ring Color	Tube Size (mm)	Description	Rack Qty	Case Qty	
456275	6 mL	Ryl Blue		Black	13 x 100	Na Hep Trace Elements	50	1200
456016	6 mL	Ryl Blue		Black	13 x 100	No Additive Trace Elements	50	1200



Heparin

- Interior tube wall is coated with lithium heparin or sodium heparin*
- May be used for determinations in clinical chemistry and immunochemistry
- Available with a gel separator that will move upon centrifugation to form a stable barrier separating the plasma from cells

* Heparin is an anticoagulant that activates antithrombin III, effectively blocking the coagulation cascade producing a plasma sample.

GBO Cat. No.	Blood Volume	Cap Color	Ring Color	Tube Size (mm)	Description	Rack Qty	Case Qty	
Lithium								
454081	1 mL	Green		White	13 x 75	PREMIUM Lithium Heparin	50	1200
454237	2 mL	Green		White	13 x 75	Plasma, Lithium Heparin	50	1200
454244	3 mL	Green		Black	13 x 75	Plasma, Lithium Heparin	50	1200
454029	4 mL	Green		Black	13 x 75	Plasma, Lithium Heparin	50	1200
456088	6 mL	Green		Black	13 x 100	Plasma, Lithium Heparin	50	1200
455084	9 mL	Green		Black	16 x 100	Plasma, Lithium Heparin	50	1200
Lithium with Gel								
454247P	3 mL	Green		Yellow	13 x 75	Plasma, Lithium Heparin with Gel Separator	50	1200
454008P	3.5 mL	Green		Yellow	13 x 75	Plasma, Lithium Heparin with Gel Separator	50	1200
456287P	3.5 mL	Green		Yellow	13 x 100	Plasma, Lithium Heparin with Gel Separator	50	1200
456087P	5 mL	Green		Yellow	13 x 100	Plasma, Lithium Heparin with Gel Separator	50	1200
455083P	8 mL	Green		Yellow	16 x 100	Plasma, Lithium Heparin with Gel Separator	50	1200
Sodium								
454302	2 mL	Green		Green	13 x 75	Plasma, Sodium Heparin	50	1200
454030	4 mL	Green		Green	13 x 75	Plasma, Sodium Heparin	50	1200
456028	6 mL	Green		Green	13 x 100	Plasma, Sodium Heparin	50	1200
455051	9 mL	Green		Green	16 x 100	Plasma, Sodium Heparin	50	1200

PREMIUM tubes have a twist cap rather than a pull cap.



EDTA

- The interior of the tube wall is coated with either K₂EDTA or K₃EDTA*
- May be used for hematology, immunohematology and viral marker testing

*The EDTA binds calcium ions and blocks the coagulation cascade

GBO Cat. No.	Blood Volume	Cap Color	Ring Color	Tube Size (mm)	Description	Rack Qty	Case Qty
K₂ EDTA							
454052	1 mL	Lavender	○ White	13 x 75	K ₂ EDTA	50	1200
454428	2 mL	Lavender	○ White	13 x 75	K ₂ EDTA	50	1200
454246	3 mL	Lavender	● Black	13 x 75	K ₂ EDTA	50	1200
454209	4 mL	Lavender	● Black	13 x 75	K ₂ EDTA	50	1200
456002	6 mL	Lavender	● Black	13 x 100	K ₂ EDTA	50	1200
K₃ EDTA							
454222	2 mL	Lavender	○ White	13 x 75	K ₃ EDTA	50	1200
454217	3 mL	Lavender	● Black	13 x 75	K ₃ EDTA	50	1200
454021	4 mL	Lavender	● Black	13 x 75	K ₃ EDTA	50	1200
456038	6 mL	Lavender	● Black	13 x 100	K ₃ EDTA	50	1200
455036	9 mL	Lavender	● Black	16 x 100	K ₃ EDTA	50	1200



Blood Bank

- May be used for routine immunohematology testing and/or viral marker testing in donor screening and clinical laboratories

GBO Cat. No.	Blood Volume	Cap Color	Ring Color	Tube Size (mm)	Description	Rack Qty	Case Qty
454208	4 mL	Pink	● Black	13 x 75	K ₂ EDTA	50	1200
456279	6 mL	Pink	○ Pink	13 x 100	K ₂ EDTA	50	1200
454012	4 mL	Pink	● Black	13 x 75	K ₃ EDTA	50	1200
456003	6 mL	Pink	● Black	13 x 100	K ₃ EDTA	50	1200
456074	6 mL	White	● Black	13 x 100	K ₃ EDTA	50	1200
456067	6 mL	Pink	● Black	13 x 100	K ₃ EDTA Clear Label	50	1200



Citrate

- Tubes are filled with buffered tri-sodium citrate solution
- May be used for routine hemostasis testing
- The citrate concentration is 3.2% (0.109 mol/L)
- Fill mark on the label indicates appropriate fill level for 1 part citrate to 9 parts blood ratio

GBO Cat. No.	Blood Volume	Cap Color	Ring Color	Tube Size (mm)	Description	Rack Qty	Case Qty
454320	0.9 mL	Blue	○ White	13 x 75	PREMIUM 3.2% Sodium Citrate	50	1200
454322	1.8 mL	Blue	○ White	13 x 75	3.2% (0.109 mol/L) Sodium Citrate	50	1200
454334	2.7 mL	Blue	● Black	13 x 75	3.2% (0.109 mol/L) Sodium Citrate	50	1200
454332	3.15 mL	Blue	● Black	13 x 75	3.2% (0.109 mol/L) Sodium Citrate	50	1200
454323*	1.8 mL	Blue	○ White	13 x 75	High Altitude 3.2% (0.109 mol/L) Sodium Citrate	50	1200
454351*	2.7 mL	Blue	● Black	13 x 75	High Altitude 3.2% (0.109 mol/L) Sodium Citrate	50	1200
454331*	3.15 mL	Blue	● Black	13 x 75	High Altitude 3.2% (0.109 mol/L) Sodium Citrate	50	1200

PREMIUM tubes have a twist cap rather than a pull cap.

* High Altitude recommended for use in locations 5,000 feet above sea level. Minimum orders are required for some items.



Glucose Determination

- Tubes contain an anticoagulant and a stabilizer: potassium oxalate and sodium fluoride
- May be used for the analysis of blood glucose and lactate

GBO Cat. No.	Blood Volume	Cap Color	Ring Color	Tube Size (mm)	Description	Rack Qty	Case Qty
454238	2 mL	Grey	○ White	13 x 75	Potassium Oxalate / NaF	50	1200
454297	4 mL	Grey	● Black	13 x 75	Potassium Oxalate / NaF	50	1200
456020	5.5 mL	Grey	● Black	13 x 100	Potassium Oxalate / NaF	50	1200



Molecular Diagnostics

- May be used for plasma preparation in molecular diagnostics for detection of viruses, parasites and bacteria
- The tube interior is spray-dried with 1.8mg of anhydrous EDTA per 1mL of blood when the tube is appropriately filled

GBO Cat. No.	Blood Volume	Cap Color	Ring Color	Tube Size (mm)	Description	Rack Qty	Case Qty
456024P	4.5 mL	Lavender	Yellow	13 x 100	K ₂ EDTA with Gel Separator	50	1200
456058P	5 mL	White	Yellow	13 x 100	K ₂ EDTA with Gel Separator	50	1200
455040P	8 mL	Lavender	Yellow	16 x 100	K ₂ EDTA with Gel Separator	50	1200



Low Volume Tubes

- Tubes have draw volumes ranging from 1 mL to 2.5 mL
- Standard 13 x 75mm PET plastic tubes with color-coded safety caps
- Availability of additives required for laboratory testing
- Functional compatibility with instrumentation
- Optimal blood to additive ratios for reduced blood volumes

GBO Cat. No.	Blood Volume	Cap Color	Ring Color	Tube Size (mm)	Description	Rack Qty	Case Qty
454236	2 mL	Red	White	13 x 75	Clot Activator	50	1200
454243P	2.5 mL	Red	White	13 x 75	Clot Activator w/gel	50	1200
454081	1 mL	Green	White	13 x 75	PREMIUM Lithium Heparin	50	1200
454237	2 mL	Green	White	13 x 75	Lithium Heparin	50	1200
454302	2 mL	Green	White	13 x 75	Sodium Heparin	50	1200
454052	1 mL	Lavender	White	13 x 75	K ₂ EDTA	50	1200
454428	2 mL	Lavender	White	13 x 75	K ₂ EDTA	50	1200
454222	2 mL	Lavender	White	13 x 75	K ₃ EDTA	50	1200
454320	0.9 mL	Blue	White	13 x 75	PREMIUM 3.2% Sodium Citrate	50	1200
454322	1.8 mL	Blue	White	13 x 75	3.2% Sodium Citrate	50	1200
454238	2 mL	Grey	White	13 x 75	Potassium Oxalate, NaF	50	1200

PREMIUM tubes have a twist cap rather than a pull cap.



VACUETTE® SECONDARY Tubes

- Available in sealed plastic bags for manual application
- Available with or without caps
- Made from polypropylene
- Are suitable for use as secondary specimen containers, pour-off tubes, storage tubes, aliquoting, freezing specimens (down to -80° C) or specimen centrifugation up to 8000g
- Threaded tube and safety cap are packaged unassembled and are ideal for sample transport in compliance with IATA regulations

GBO Cat. No.	Blood Volume	Tube Size (mm)	Cap Color	Description	Bag Qty	Case Qty
459000	5 mL	13 x 75	○	SECONDARY Tube MULTIPLEX Premium, PP	500	2000
459001	5 mL	13 x 75	●	SECONDARY Tube MULTIPLEX Premium, PP	500	2000
459010	5 mL	13 x 75		SECONDARY Tube MULTIPLEX Premium, PP, no cap	500	2000



Disposable Tourniquet / Snap Caps

- For supplemental convenience for blood collection processes

Disposable Tourniquet

GBO Cat. No.	○ Color	Description	Box/Bag Qty	Case Qty
840053	● Blue	Disposable Tourniquet (25 ea/roll; 20 rolls/box)	5	2500

Snap Caps

371517	● Green	Snap Cap for Recapping 13mm Tubes	1000	5000
371518	● Yellow	Snap Cap for Recapping 13mm Tubes	1000	5000
371519	● Royal Blue	Snap Cap for Recapping 13mm Tubes	1000	5000
371522	● Red	Snap Cap for Recapping 13mm Tubes	1000	5000
371523	● Lavender	Snap Cap for Recapping 13mm Tubes	1000	5000
371527	● Pink	Snap Cap for Recapping 13mm Tubes	1000	5000



**Disposable Tourniquet
(Cat. #840053)**



MiniCollect® Capillary Blood Collection System



MiniCollect® Capillary Blood Collection Tubes offer caps with flexible rubber “cross-cuts” that accommodate either a funnel or coated plastic capillary collection device to collect the specimen without removing the cap. Upon removal of the funnel or capillary, the cap closes to prevent loss of specimen.

The following MiniCollect® features increase the likelihood of successful specimen collection.

- Each tube has a label for proper patient identification
- Appropriate fill level indicators are located on the tube (1 mL) or on the label (<1 mL) to indicate optimal blood-to-additive ratio
- Choice of using either a funnel or capillary as a collection device through the “cross-cut” caps based on user preference
- Carrier tubes can be used as adapters for centrifugation and/or analyzer racks in addition to improving handling
- Amber carrier tubes are available for shielding light sensitive analytes
- MiniCollect® tubes and accessories are latex free to provide protection from latex allergy and skin irritation



MiniCollect® Capillary Blood Collection System

- Serum and Heparin Plasma Tubes are used for testing in clinical chemistry
- EDTA Tubes are used for testing in hematology
- K₃ EDTA Tubes are FDA cleared for lead testing
- Serum and Plasma Tubes with Gel contain an inert, acrylic barrier that moves upward during centrifugation
- Coagulation Tubes are for use with **venous blood only**

GBO Cat. No.	Tube Size (mm)	○ Cap Color	Description	Fill Volume	Rack Qty	Case Qty
450470	11x40	● Red	Serum Clot Activator	1 mL	100	1000
450472	11x40	● Gold	Serum Clot Activator with Gel	0.8 mL	100	1000
450480	11x40	● Lavender	K ₂ EDTA	0.5 mL	100	1000
450474	11x40	● Lavender	K ₃ EDTA	1 mL	100	1000
450475	11x40	● Lavender	K ₃ EDTA	0.5 mL	100	1000
450476	11x40	● Lavender	K ₃ EDTA	0.25 mL	100	1000
450477	11x40	● Green	Li Heparin	1 mL	100	1000
450479	11x40	● Light Green	Li Heparin with Gel	0.8 mL	100	1000
450413	11x40	● Blue	3.2% (0.109M) Sodium Citrate (for venous blood only)	1 mL	100	1000

MiniCollect® Collection Devices & Accessories

GBO Cat. No.	Tube Size	○ Color	Description	Rack Qty	Case Qty
450419	13x75 mm	● Amber	Amber Carrier Tube	100	1000
450420	13x75 mm	○ Clear	Clear Carrier Tube	100	1000
450421			Funnel	100	1000
450431	80 µl	● Red	Capillary for Serum	100	1000
450434	80 µl	● Lavender	Capillary for EDTA	100	1000
450436	80 µl	● Green	Capillary for Li Heparin	100	1000

MiniCollect® tubes require a funnel or coordinating capillary collection device for specimen collection.



MiniCollect® Lancelino Safety Lancets

- Contact-activated with automatic needle/blade retraction after use
- Safe, gentle and efficient for capillary collections involving various skin conditions and volume requirements

GBO Cat. No.	Color	Description	Rack Qty	Case Qty
450520	● Light Green	Safety Lancet, 30G, penetration depth 1.2mm	200	2000
450521	● Lavender	Safety Lancet, 25G, penetration depth 1.5mm	200	2000
450522	● Blue	Safety Lancet, 21G, penetration depth 1.8mm	200	2000
450523	● Green	Safety Lancet, 21G, penetration depth 2.4mm	200	2000
450524	● Yellow	Safety Lancet with Blade, 0.8 mm, penetration depth 2mm	200	2000



VACUETTE® Urine Collection System

Overview of Tube Types and Areas of Application

VACUETTE® Urine Tubes – no additive, round base

These tubes are used as collection containers and/or transport containers for:

- ◀ Chemical urinalysis
- ◀ Urine test strips

It is recommended that specimens are analyzed shortly after collection. The stability during the preanalytical phase is determined by the temperature, the mechanical load and time. Samples may remain stable longer when cooled – this is specified by the manufacturer of the method or instrument used for testing.

VACUETTE® Urine Tubes – no additive, conical base

These tubes are used as collection containers and/or transport containers for:

- ◀ Microscopic examination of urine sediment.

The time from collection to analysis of urine sediment should not be longer than two hours.

VACUETTE® Urine Culture Tubes with preservative

The VACUETTE® Urine CCM Tube keeps the bacterial count stable for up to 48 hours at room temperature so that there is no need to refrigerate.

The quick solubility of the stabilizer is a distinguishing feature of the tube. In comparison with other additives, the improved solubility ensures immediate stabilization of the sample.

The VACUETTE® Urine tube with boric acid inhibits bacterial growth in urine for up to 24 hours. These tubes are used as collection containers and/or transport containers.

Please keep in mind that preservatives can interfere with microscopic examinations and urine test strips and should therefore not be used for these determinations unless validated or indicated for use by the manufacturer of the test method.

	Chemical urinalysis	Urine test strips	Microbiological studies	Urine sedimentation
Urine no preservative	+	+		+
Urine CCM Tube			+	



Urine Tubes

- No additive tubes are used as collection and/or transport containers and may be used for chemical urinalysis
- Conical tubes are used for microscopic examination of urine sediment
- Sterile, leak-proof and made out of clear unbreakable, disposable plastic

GBO Cat. No.	Draw Volume	Tube Size (mm)	Cap Color	Ring Color	Description	Rack Qty	Case Qty
455007	10 mL	16 x 100	Yellow	☉ Yellow	Urine No Additive Round Bottom	50	1200
455028	9 mL	16 x 100	Yellow	☉ Yellow	Urine No Additive Conical Bottom	50	1200
454239	4 mL	13 x 75	Yellow	● Black	Urine Culture w/ Boric Acid Round Bottom	50	1200
455003	10 mL	16 x 100	Yellow	● Black	Urine Culture w/ Boric Acid Round Bottom	50	1200
455029	9 mL	16 x 100	Yellow	● Black	Urine Culture w/ Boric Acid Conical Bottom	50	1200
456007	6 mL	13 x 100	Yellow	☉ Yellow	Urine PREMIUM No Additive Round Bottom	50	1200

PREMIUM tubes have a twist cap rather than a pull cap.



Urine CCM Tubes

- Preservative ensures urine samples for microbiological culture are immediately stabilized for up to 48 hours at room temperature



GBO Cat. No.	Draw Volume	Tube Size (mm)	Cap Color	Ring Color	Description	Rack Qty	Case Qty
454486	4 mL	13 x 75	Yellow	● Black	Urine CCM, Round Base, non-ridged	50	1200
456284	6 mL	13 x 100	Yellow	● Black	Urine CCM, Round Base, non-ridged	50	1200
455243	9 mL	16 x 100	Yellow	● Black	Urine CCM, Conical Base, non-ridged	50	1200
455052	10 mL	16 x 100	Yellow	● Black	Urine CCM, Round Base, non-ridged	50	1200



Urine Cups & Accessories

- VACUETTE® Urine Cups are used to provide the means for collection of urine specimens
- The cups are sterile, break-proof and leak-proof
- The Urine Transfer Device enables a clean transfer of the urine sample directly into VACUETTE® Urine Tubes
- Urine Transfer Device available separately or integrated with the urine cup

GBO Cat. No.	Size	Description	Bag Qty	Case Qty
450251		Urine Transfer Device	50	600
724300	100 mL	Urine Cup, Screw Cap w/ Resealable Port	1	100
724310	100 mL	Urine Cup with Integrated Transfer Device	1	200
724320	100 mL	Urine Cup, Screw Cap	1	300
453022	4 mL	Urine Boric Acid Kit [Boric Acid Tube (454239) + Urine Transfer Device (450251)]	1	300
453031	4 mL	Urine CCM Kit [CCM Tube (454486) + Urine Transfer Device]	1	300
453032	9 mL	Urine CCM Kit [CCM Tube (455243) + Urine Transfer Device]	1	300

Tube Selection Guide

Tube Type		Serum		Plasma		Coagulation		Glucose		EDTA		Molecular Diagnostics				
Additive	Cap Color	Clot Activator	No Additive	Lithium Heparin	Sodium Heparin	Sodium Citrate	3.2%	PO/NaF	K2	K3	K2	K3	K2 EDTA + Gel	K2 EDTA + Gel	K2 EDTA + Gel	Sodium Heparin
0.9 mL	13 x 75					454320										
1 mL	13 x 75		454081			454322		454052								
1.8 mL	13 x 75					454323*										
2 mL	13 x 75	454236			454302			454238	454428	454222						
2.5 mL	13 x 75	454243P														
2.7 mL	13 x 75					454334										
3 mL	13 x 75		454241			454351*										
3.15 mL	13 x 75									454246	454217					
3.5 mL	13 x 75					454332										
3.5 mL	13 x 75	454067P				454331*										
		454228P														
4 mL	13 x 75							454297	454209	454021	454208	454012				
3.5 mL	13 x 100															
4 mL	13 x 100															
4.5 mL	13 x 100															
5 mL	13 x 100															
5.5 mL	13 x 100							456020								
6 mL	13 x 100	456089														
		456048*	456085		456028				456002	456038	456279	456003	456074			456275
			456016													
7 mL	16 x 100															
			455099**													
8 mL	16 x 100															
			455071P													
9 mL	16 x 100	455092	455010P													
			455084		455051					455036						

* High Altitude

** Transport Tube

+ Clear Label

Gold Cap with Gel Separator

RING COLOR INDICATOR



Gel Separation



Standard Draw



Pediatric Draw



Sodium Heparin



Blood Bank

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24121	56	373277	42	454241	61	623201	16	655075	30
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115101	16	373292	43	454247P	62	627160	21	655077	30
115261	16	373293	43	454244	62	627161	50	655079	30
115262	16	381061	48	454246	63	627830	24	655080	29
120160	16	381070	48	454297	64	627860	21	655081	29
120161	16	381080	48	454302	65	627861	21	655083	30
120180	16	381081	48	454320	65	627870	21	655085	29
120190	16	421084	47	454322	65	627871	21	655086	30
121261	2	421161	49	454323	64	627960	26	655087	30
121263	2	421180	49	454331	64	627965	21	655088	30
121277	2	421084	49	454332	64	627975	21	655090	30
121278	2	444820	47	454334	64	627979	25	655094	30
121279	2	450040	58	454351	64	628102	50	655095	30
121280	2	450041	58	454428	65	628160	21	655096	30
122261	2	450042	58	454486	70	628161	50	655097	30
122263	2	450043	58	455001	61	628930	26	655098	30
122263-2DG	4	450047	57	455003	70	628940	27	655101	29
122272	2	450048	57	455007	70	628950	28	655160	29
122277	2	450068	58	455040P	65	628960	26	655161	29
122278	2	450069	58	455010P	61	628979	25	655162	29
122279	2	450070	57	455028	70	629161	51	655163	29
122280	2	450071	57	455029	70	629180	51	655180	29
123261	2	450072	57	455036	63	632161	50	655182	29
123263	2	450073	57	455051	62	632180	50	655185	29
123263-2DG	4	450075	57	455052	70	633161	50	655201	39
123277	2	450076	57	455071P	61	633175	51	655203	39
123278	2	450077	57	455083P	62	633179	50	655204	39
123279	2	450081	55	455084	62	633180	50	655205	39
123280	2	450082	55	455092	61	633181	50	655206	39
124261	2	450083	55	455099P	61	635102	51	655209	39
124263	2	450084	55	455243	70	635161	51	655261	39
124273	2	450085	55	456002	63	637102	51	655801	45
124274	2	450086	55	456003	63	637161	51	655809	44
124275	2	450090	55	456007	70	639102	50	655830	24
124276	2	450091	55	456016	62	639160	21	655840	24
126261	2	450092	55	456018P	61	639161	50	655841	24
126263	2	450095	55	456020	64	650001	29	655846	24
126263-2DG	4	450096	55	456024P	65	650061	29	655849	24
126277	2	450099	55	456028	62	650101	29	655865	45
126278	2	450160	55	456038	63	650160	29	655866	37
126279	2	450161	55	456048	61	650161	29	655891	38
126280	2	450181	57	456058P	65	650162	29	655892	38
127261	2	450184	55	456067	63	650172	29	655892P	38
127263	2	450185	55	456073P	61	650180	29	655900	30
127263-2DG	4	450209	57	456074	63	650185	29	655901	29
127277	2	450225	56	456085	61	650201	39	655903	30
127278	2	450226	56	456087P	62	650203	39	655904	30
127279	2	450228	56	456088	62	650204	39	655906	30
127280	2	450230	56	456089	61	650205	39	655930	26
163160	16	450235	56	456275	62	650206	39	655936	26
163161	16	450239	56	456279	63	650207	39	655936	26
163288	14	450241	56	456284	70	650209	39	655940	27
163290	14	450251	70	456287P	62	650261	39	655940-005	27
163290P	14	450413	68	456292P	61	650901	29	655944	27
164160	16	450419	68	459000	66	650970	29	655945	27
164161	16	450420	68	459001	66	650979	29	655946	27
184261	16	450421	68	459010	66	651001	29	655947	27
187261	16	450431	68	501870	46	651061	29	655948	27
187262	16	450434	68	541070	17	651101	29	655950	28
188161	12	450436	68	541080	17	651160	29	655956	28
188171	12	450470	68	542000	12	651161	29	655970	29
188240	13	450472	68	542040	12	651162	29	655976	30
188261	12	450474	68	542070	12	651180	29	655976-SIN	30
188271	12	450475	68	543079	22	651201	39	655976-SIN	25
188280	13	450476	68	543979	22	651203	39	655980	29
188283	13	450477	68	604107	11	651204	39	655980	26
191160	16	450479	68	604160	10	651205	39	655983	30
191161	16	450480	68	604181	10	651206	39	655983	26
191180	16	450520	68	606107	11	651209	39	655986	26
210261	12	450521	68	606160	10	651261	39	655990	28
210270	12	450522	68	606180	10	651901	29	655995	28
227245	13	450523	68	606190	11	651970	29	655996	28
227250	15	450524	68	607107	11	652201	44	655997	28
227255	15	453022	70	607160	10	652210	44	656101	48
227261	12	453031	70	607180	10	652230	44	656161	48
227270	12	453032	70	607190	11	652230P	44	656170	48
227280	13	454008P	62	608201	43	652235	44	656171	48
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