



BD Falcon™ Cell Culture Products

BD Biosciences Discovery Labware
www.bdbiosciences.com

BD Biosciences

Clontech
Discovery Labware
Immunocytometry Systems
Pharming



Unique Surface Chemistry for Enhanced Cell Culture

Consistent cell culture conditions are required for reproducible research results. In the manufacture of all cell cultureware, hydrophobic polystyrene is permanently rendered hydrophilic to support cell attachment and spreading.^{1,2,3} The consistency of this surface depends on the treatment method used.

Many manufacturers have long used atmospheric plasma treatments (i.e., corona) to create hydrophilic surfaces. In corona treatment, a high-voltage discharge creates a reactive gas plasma above the growth surface of the vessel. In this process, the highly interactive gas-plasma mixture is exposed to ambient air. The consistency of the treatment surface can therefore be compromised by day-to-day environmental changes.

At BD Biosciences, molded polystyrene vessels are placed inside a chamber where a partial vacuum is created. A proprietary mixture of gases is fed into the chamber and a controlled electrical discharge is used to form a gas plasma. The enclosed, highly controlled environment prevents contamination from the air, ensuring a pure and consistent treatment surface.

A major research investment by BD Biosciences resulted in the development of this unique vacuum gas-plasma process used to produce both BD Primaria™ and traditional tissue-culture (TC) surfaces on BD Falcon™ dishes, plates, flasks and roller bottles.

The incorporation of nitrogen-containing cations has been correlated to attachment and spreading of primary endothelial cells in a clonal cell-growth assay.⁴ The complex surface on BD Primaria cultureware is homogeneous and stable and has been in use by researchers for over a decade to improve attachment and differentiation of a variety of cell types. For example,

cell biologists have used BD Primaria for cultivating hepatocytes,^{5,6} neuronal cells⁷ and other endothelial cells.⁸ The surface chemistry of BD Primaria products is confirmed by Electron Scanning for Chemical Analysis (ESCA).

BD Biosciences' cell culture products meet high quality control standards. All of our cell culture offerings are manufactured under the registered ISO 9000 series Quality Systems. A sensitive clonogenic assay is used to validate the specific conditions used to treat each new TC product. Routine, 72-hour confluency testing ensures lot-to-lot quality. Our vacuum gas-plasma treatment process makes BD Falcon cell cultureware your best choice — for confidence in the consistency of your cell culture conditions.

References

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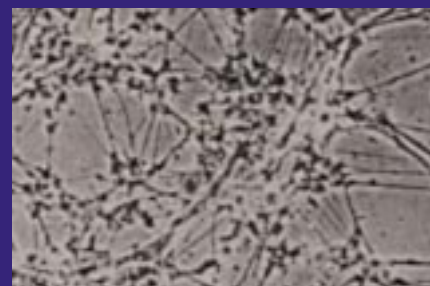
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8. Silverman, D.J., et al., Primary isolation of human umbilical vein endothelial cells on a surface-modified tissue culture dish. *BDL Monograph* (1986).

Additional References

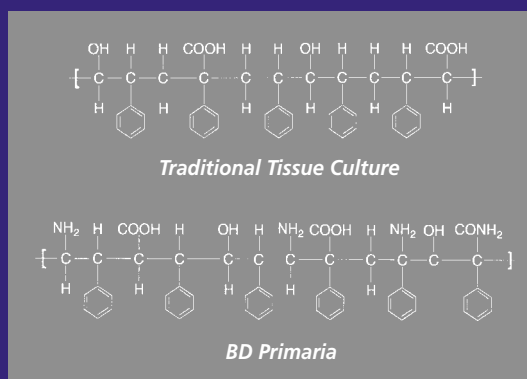
- Chat, G. and Coca-Prados, M., Comparison of tissue culture systems for the growth of ciliary epithelial cells. *BDL Monograph* (1986).
- Chinn, J.A., et al., Laboratory preparation of plasticware to support cell culture. *J. Tissue Culture Methods* 16:155 (1994).



Traditional Tissue Culture



BD Primaria™



When chick embryo spinal cord neurons are cultured on BD Primaria, growth is enhanced and extensive neurite development occurs (above, right). In this experiment, cells clumped and detached from traditional TC plates (above, left) after 20 days in culture, but remained viable and differentiated on Primaria.

Note: At pH 7, carboxy groups may be slightly dissociated and assume a negative (anionic) charge. Amine groups may protonate and assume a positive charge (cationic).



BD Falcon™ Flasks feature various neck designs, shapes and cap styles to meet your application needs.

What makes the BD Falcon™ line of cell culture flasks stand out from the competition is not only its surface treatment, but also the TC-friendly packaging, variety of flasks and assortment of caps.

When BD Biosciences decided to redesign its flask packaging, a special task force was appointed to determine what customers valued most. The team visited stockrooms, distributor warehouses and research laboratories to identify customer concerns and priorities. Several prototype packages were developed and reviewed by nearly 200 customers in seven countries which led to further refinements and modifications. This process provided the information needed to deliver innovative packaging that meets customer needs.

- Convenient reseal tab on the bag
- Innovative bag materials that will not scuff or scratch the flask optical surface
- Double-wall bags for increased sterility assurance
- Medical-style, peel-open bags for guaranteed flask sterility
- Recyclable bag material (LDPE)
- Easy-open case — no knife required

The innovative shape of the BD Falcon low-profile flask allows access to all corners.

A full line of flasks includes a low-profile 150 cm² flask for efficient stacking and incubator utilization. Our patented “Locking Incubation Position” prevents caps from falling off or closing while in the open position. The innovative shape of our low-profile flasks permits access to all corners with a pipet or scraper. Boldly printed graduations make volumes easy to read.

Choose from three easy on/off cap styles

BD Biosciences offers several easy on/off cap styles suited to your application and feel right in your hand. Our industry-standard Plug-Seal Caps provide a liquid-tight seal when closed and an “open incubation” position for reliable gas exchange when partially opened. A reference bar on the outside of the cap is aligned with the “FALCON” on the flask for precise open-incubation conditions. Our Vented Caps allow consistent gas

exchange when the caps are in the closed position. Gases required for cell growth and metabolism pass freely through the vent while microorganisms cannot. Lined, Phenolic Caps are available for long-term cultures. The rigid cap material allows the cap to be easily spun onto the neck during repetitive manipulations. Our white caps identify nontreated flasks.

BD Falcon™ Cap Covers offer added protection for vented flasks

To prevent the effects of rapid pH reequilibration on cell viability and cloning efficiency when vented flasks are removed from the incubator, BD Biosciences offers a full line of easy on/off flask Cap Covers. Designed to fit BD Falcon™ Vented or Plug-Seal Caps, our Cap Covers come in four colors for quick identification of cell lines or experimental condition.



Bar coded flasks certified for use in TAP's Select automated cell culture system.

BD Falcon™ Cell Culture Flasks

12.5 cm² Canted Neck

Total volume: 25 ml; Qty/bag: 20

Growth Surface	Cap Style	Qty/Case	Cat. No.
Standard TC	Plug-seal	100	353018
Standard TC	Vented	100	353107

25 cm² Canted Neck

Total volume: 50 ml; Qty/bag: 20

Growth Surface	Cap Style	Qty/Case	Cat. No.
Standard TC	Plug-seal	200	353014
Standard TC	Vented	100	353108
Primaria TC	Plug-seal	200	353813
Primaria TC	Vented	100	353808

25 cm² Canted Neck

Total volume: 70 ml; Qty/bag: 20

Growth Surface	Cap Style	Qty/Case	Cat. No.
Standard TC	Plug-seal	200	353082
Standard TC	Vented	100	353109
Standard TC	Phenolic	200	353081
Nontreated	Plug-seal	200	353009

75 cm² Straight Neck

Total volume: 250 ml; Qty/bag: 5

Growth Surface	Cap Style	Qty/Case	Cat. No.
Standard TC	Plug-seal	100	353024
Standard TC	Vented	100	353110
Standard TC	Phenolic	100	353023
Primaria TC	Plug-seal	100	353824
Primaria TC	Vented	100	353810

75 cm² Canted Neck

Total volume: 250 ml; Qty/bag: 5

Growth Surface	Cap Style	Qty/Case	Cat. No.
Standard TC	Plug-seal	60	353135
Standard TC	Vented	60	353136
Standard TC	Phenolic	60	353134
Nontreated	Plug-seal	60	353133

150 cm² Canted Neck

Total volume: 600 ml; Qty/bag: 5

Growth Surface	Cap Style	Qty/Case	Cat. No.
Standard TC	Plug-seal	40	355000
Standard TC	Vented	40	355001

175 cm² Straight Neck

Total volume: 750 ml; Qty/bag: 5

Growth Surface	Cap Style	Qty/Case	Cat. No.
Standard TC	Plug-seal	40	353028
Standard TC	Vented	40	353112
Standard TC	Phenolic	40	353045
Standard TC	Vented, Bar coded	40	353118

300 cm² Straight Neck

Total volume: 1900 ml; Qty/bag: 1

Growth Surface	Cap Style	Qty/Case	Cat. No.
Standard TC	Plug-seal	12	353099
Standard TC	Vented	12	353113



Plug-seal, vented and phenolic caps

BD Falcon™ Flask Cap Covers

For 12.5 cm² and 25 cm² Flask Caps

Qty/Color	Qty/Case	Cat. No.
50	200	353120

For 75 cm² Straight-Neck Flask Caps

Qty/Color	Qty/Case	Cat. No.
25	100	353122

For 75 cm² Canted-Neck Flask Caps

Qty/Color	Qty/Case	Cat. No.
25	100	353128

For 175 cm² Flask Caps

Qty/Color	Qty/Case	Cat. No.
25	100	353132



Cap covers available in blue, pink, yellow and green

Multiwell Cell Culture Plates



BD Falcon™ Plates feature unique surface chemistries for better cell attachment.

BD Falcon™ Multiwell Cell Culture Plates

BD Biosciences uses a well characterized, crystal-grade polystyrene and a highly controlled vacuum-gas plasma process to create the consistent growth surfaces on BD Falcon™ cell culture plates.

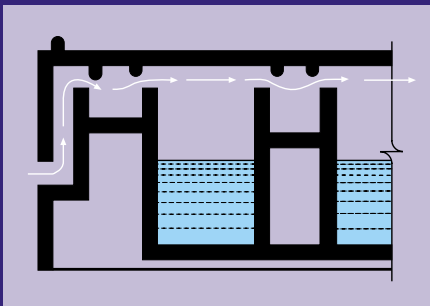
Our extensive line of multiwell plates feature a patented labyrinth lid, condensation rings and deep-well design to control contamination while reducing evaporation and minimizing edge effects. The plates feature serrated gripping panels for easier handling and a writing patch for plate identification. Our plates are available nontreated, TC treated or with our exclusive BD Primaria™ treatment to meet all your application needs.

BD Falcon plates are supplied in convenient, medical-style packaging for sterile product presentation. BD Falcon Ready-Stack (RS) tray packaging is designed for higher throughput applications.



Serrated gripping panels facilitate easy handling.

Low-Evaporation Lid



An innovative labyrinth air-passage system provides a tortuous path for gas exchange across BD Falcon plates. This patented feature reduces evaporation and minimizes contamination.

6-well flat-bottom with Lid

Growth area: 9.6 cm²; Well volume: 15.5 ml

Growth Surface	Qty/Pkg	Qty/Case	Cat. No.
Standard TC	1/tray	50	353046
Standard TC	6/bag	36	353224
Standard TC	10/RS tray	60	353934
Primaria TC	1/tray	50	353846
Nontreated	1/tray	50	351146

12-well flat-bottom with Lid

Growth area: 3.8 cm²; Well volume: 6.0 ml

Growth Surface	Qty/Pkg	Qty/Case	Cat. No.
Standard TC	1/tray	50	353043
Standard TC	6/bag	36	353225
Nontreated	1/tray	50	351143

24-well flat-bottom with Lid

Growth area: 2.0 cm²; Well volume: 3.5 ml

Growth Surface	Qty/Pkg	Qty/Case	Cat. No.
Standard TC	1/tray	50	353047
Standard TC	6/bag	36	353226
Standard TC	10/RS tray	60	353935
Primaria TC	1/tray	50	353847
Nontreated	1/tray	50	351147

48-well flat-bottom with Lid

Growth area: 0.75 cm²; Well volume: 1.4 ml

Growth Surface	Qty/Pkg	Qty/Case	Cat. No.
Standard TC	1/tray	50	353078
Standard TC	6/bag	36	353230
Nontreated	1/tray	50	351178

96-well flat-bottom with Lid

Growth area: 0.32 cm²; Well volume: 0.37 ml

Growth Surface	Qty/Pkg	Qty/Case	Cat. No.
Standard TC	1/tray	50	353072
Standard TC	5/bag	50	353075
Standard TC	14/RS tray	84	353936
Primaria TC	1/tray	50	353872
Nontreated	1/tray	50	351172

96-well flat-bottom without Lid

Growth area: 0.32 cm²; Well volume: 0.37 ml

Growth Surface	Qty/Pkg	Qty/Case	Cat. No.
Standard TC	1/tray	50	353070

96-well U-bottom with lid

Growth area: 0.36 cm²; Well volume: 0.32 ml

Growth Surface	Qty/Pkg	Qty/Case	Cat. No.
Standard TC	1/tray	50	353077
Standard TC	5/bag	50	353227
Nontreated	1/tray	50	351177

96-well U-bottom without Lid

Growth area: 0.36 cm²; Well volume: 0.32 ml

Growth Surface	Qty/Pkg	Qty/Case	Cat. No.
Standard TC	1/tray	50	353076

96-well Lid

	Qty/Pkg	Qty/Case	Cat. No.
Lid, sterile	1/bag	50	353071



Choose from an assortment of exceptionally flat dishes for distortion-free optics.

BD Falcon™ Cell Culture Dishes

Our extensive line of nonpyrogenic BD Falcon™ cell culture dishes are available with standard TC treatment or BD Primaria™ to support cell attachment and spreading. Vacuum-gas plasma treatment permanently and consistently modifies the cell growth surface for uniform chemistry and attachment.

BD Falcon dishes are exceptionally flat for distortion-free optics. The dish lids are designed for optimal gas exchange. Stacking rings on the dishes allow for easier stacking and handling. Sterilized by gamma irradiation, the crystal-grade polystyrene dishes are packaged in peel-open, medical-style bags.

35 x 10 mm Style Easy-Grip Dishes

Actual dimensions: 40.28 mm O.D. x 6.17 mm
Actual growth area: 11.78 cm²
Working volume: 2.5-3.0 ml

Growth Surface	Qty/ Sleeve	Qty/ Case	Cat. No.
Standard TC	20	500	353001
Primaria TC	20	200	353801
Nontreated	20	500	351008

60 x 15 mm Style Standard Dishes

Actual dimensions: 54.81 mm O.D. x 13.26 mm
Actual growth area: 21.29 cm²
Working volume: 6.0-7.0 ml

Growth Surface	Qty/ Sleeve	Qty/ Case	Cat. No.
Standard TC	20	500	353002
Primaria TC	20	200	353802
IVF TC	20	500	353652
Nontreated	20	500	351007

60 x 15 mm Style Easy-Grip Dish

Actual dimensions: 52.10 mm O.D. x 13.13 mm
Growth area: 19.5 cm²
Working volume: 6.0-7.0 ml

Growth Surface	Qty/ Sleeve	Qty/ Case	Cat. No.
Standard TC	20	500	353004

Our easy-grip dishes improve handling.

The unique design and frosted rim found on BD Falcon easy-grip dishes improve the handling of small dishes. The ability to pick up a small dish conveniently without accidentally removing the lid allows you to work faster and improves aseptic manipulation.

A sensitive clonogenic assay using MRC-5 cells, a diploid human fibroblast line, is used to validate the manufacturing process for each BD Falcon TC product. Routine testing of standard TC products is performed by testing growth to confluency at 72 hours with MRC-5 or WI-38 cells, a diploid human lung fibroblast cell line. The surface chemistry of each lot of BD Primaria products is confirmed by ESCA.

100 x 20 mm Style Standard Dishes

Actual dimensions: 89.43 mm O.D. x 19.18 mm
Actual growth area: 58.95 cm²
Working volume: 16.0-17.5 ml

Growth Surface	Qty/ Sleeve	Qty/ Case	Cat. No.
Standard TC	20	200	353003
Primaria TC	20	200	353803
Nontreated	20	200	351005

150 x 25 mm Style Gridded Dish

(20 mm grid molded in base)

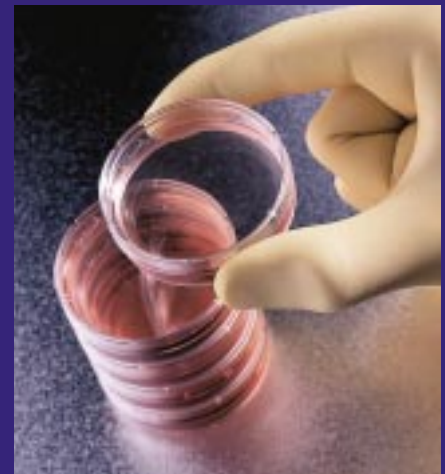
Actual dimensions: 142.57 mm x 24.77 mm
Actual growth area: 156.36 cm²
Working volume: 45.0-50.0 ml

Growth Surface	Qty/ Sleeve	Qty/ Case	Cat. No.
Standard TC	10	100	353025
Nontreated	10	100	351013

60 x 15 mm Style Center-well Organ Culture Dish

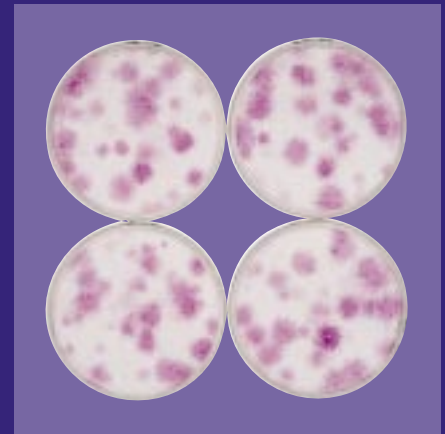
Actual dimensions: 54.84 mm O.D. x 13.56 mm
Growth area in well: 2.89 cm²

Growth Surface	Qty/ Sleeve	Qty/ Case	Cat. No.
Standard TC	20	500	353037
IVF TC	20	500	353653



Easy-grip dishes

TC Process Validation



Each BD Falcon tissue culture product is developed using a sensitive clonogenic assay.¹ Shown here is a 35 mm dish with MRC-5 cells stained with crystal violet.

Reference

1. Freshney, R.I., Culture of animal cells: a manual of basic technique, 2d ed., Wiley-Liss, London, p. 83 (1987).



BD Falcon™, the first manufacturer of disposable petri dishes, continues to be the leading source of high-quality, research-grade petri dishes. A variety of standard and specialty petri dishes are offered to meet your application needs.

Unique Dish Designs

The unique design and frosted rim found on BD Falcon™ Easy-Grip Dishes improves the handling of small dishes. The BD Falcon Tight-Fit Lid Dish minimizes sample dehydration.

BD Falcon™ Integrid Dishes

BD Falcon Integrid Dishes are available in the large 150 mm size as well as the square 100 mm size. The molded-in grid patterns on the outside bottom of the dishes facilitate locating and counting colonies.

BD Falcon™ Compartment Dishes

The BD Falcon Compartment Dishes allow differential studies of organisms or media in a common environment. The compartments enable minimal media use and conserve storage space. The dishes come in a variety of formats with two, three or four compartments. The numbered segments and the triangular reference mark on the side wall of the dish bottom facilitate procedures requiring an orientation point.

BD Falcon™ Bacteriological Petri Dishes

	<i>Qty/Sleeve</i>	<i>Qty/Case</i>	<i>Cat. No.</i>
35 x 10 mm Style Easy-Grip Dishes Actual dimensions: 40.28 O.D. x 6.17 mm	20	500	351008
60 x 15 mm Style Standard Dishes Actual dimensions: 54.81 O.D. x 13.26 mm	20	500	351007
60 x 15 mm Style Standard Dishes Actual dimensions: 87.91 O.D. x 13.72 mm	20	500	351029
150 x 15 mm Style Standard Dishes Actual dimensions: 142.37 O.D. x 17.15 mm	10	100	351058
100 x 15 mm Style Optilux™ Dishes Actual dimensions: 88.08 O.D. x 13.34 mm	20	500	351001
100 x 20 mm Style Optilux™ Dishes Actual dimensions: 89.43 O.D. x 19.18 mm	20	200	351005
50 x 9 mm Style Tight-Fit Lid Dish Actual dimensions: 50.25 O.D. x 8.26 mm	20	500	351006

BD Falcon™ Compartment Dishes

100 x 15 mm Style Compartment Dishes

Actual dimensions: 86.30 O.D. x 12.70 mm

	<i>Qty/Sleeve</i>	<i>Qty/Case</i>	<i>Cat. No.</i>
I-Plate (two sections)	20	500	351003
Y-Plate (three sections)	20	500	351004
X-Plate (four sections)	20	500	351009

BD Falcon™ Integrid Dishes

	<i>Qty/Sleeve</i>	<i>Qty/Case</i>	<i>Cat. No.</i>
100 x 15 mm Style Square Dish Actual dimensions: 90.50 O.D. x 15.24 mm Grid size: 13 mm	10	300	351112
150 x 25 mm Style Round Dish Actual dimensions: 142.57 O.D. x 24.77 mm Grid size: 20 mm	10	100	351013

BD Falcon™
Roller Bottles are
manufactured in
a class 100,000
clean room.



BD Falcon™ TufRol™ Roller Bottles

The BD Falcon™ TufRol™ Roller Bottle has a one-piece design. While polystyrene does not normally offer high-impact resistance, the TufRol bottle is manufactured using a proprietary manufacturing process that provides good impact resistance. This inherent high-strength feature reduces the risk of messy spills and loss of precious contents during accidental mishandling.

Roller bottles are used in both research and manufacturing applications involving the scale-up of mammalian cells for purposes of virus propagation and bioproduct production. BD Falcon Roller Bottles are tissue-culture treated, nonpyrogenic and sterilized by gamma irradiation. As with most BD Falcon products, our Roller Bottles are manufactured under a registered ISO 9002 Quality System.



Easy on/off polyethylene caps or vented cap styles are available.

Custom Products

Since many industrial customers have special requirements relative to labeling, lot control, packaging configurations and delivery schedules, we are able to develop custom services and products to suit individual needs. As with all BD Biosciences products, certification is available upon request.

Multiple Cap Styles and Surface Types

BD Falcon Roller Bottles are available with a smooth surface with a growth area of 850 cm² or a pleated surface with a growth area of 1450 cm². Easy on/off or vented cap styles are available. The vented cap has an integral hydrophobic 0.2 µm microporous membrane filter vent, allowing consistent gas exchange when the cap is in the closed position.

Automation-Friendly

One-piece design of BD Falcon Roller Bottles is compatible with manual or automated filling systems. Our Roller Bottles are supplied with easy on/off polyethylene caps that are designed to prevent mistthreading and to provide a secure seal.

BD Falcon™ Roller Bottles

Smooth Surface

Growth area: 850 cm²

Cap	Qty/Bag	Qty/Case	Cat. No.
Easy on/off	2	20	353007
Easy on/off	20	20	353008
Easy on/off	20	20	353088
	(double bagged)		
Vented	2	20	353068

Pleated Surface

Growth area: 1450 cm²

Cap	Qty/Bag	Qty/Case	Cat. No.
Easy on/off	20	20	353079
Vented	20	20	353069
	(double bagged)		

Caps

	Qty/Bag	Qty/Case	Cat. No.
Easy on/off	250	500	358027
Vented	250	500	353101

BD Cell™ MAb Medium

BD Cell™ is a new basal medium formulated to produce high-yield monoclonal antibody (MAb) secretion using serum or serum-free supplementation. This system enables the purification of 5 to 25 times more antibody compared to conventional media with similar supplementation. BD Cell also reduces media consumption and labor cost.

Benefits of BD Cell™ in Roller Bottle Production

First evaluated in roller bottles, BD Cell has proven itself a worthy alternative to traditional basal media. While a standard method of culturing antibody, roller bottle production has some limitations: extensive labor and frequent feedings. The initial roller bottle evaluation compared BD Cell MAb Medium (basal) with Iscove's Modified Dulbecco's Medium (IMDM) both supplemented with 10 percent fetal bovine serum (FBS). The cultures were inoculated at a density of 2×10^5 cells/ml. The IMDM was run conventionally with harvesting and feeding performed every two to three days. By contrast, the BD Cell culture was run batch fed and incubated untouched for 21 days. Now evaluated in a production environment on more than 300 hybridoma lines, BD Cell's average increase of antibody yield is 8 to 10 times that of classic IMDM media.

In the biopharmaceutical industry, BSE concerns have resulted in the need to replace media that contain animal-derived components with a non-animal alternative. The challenge has been to make substitutions that do not adversely affect the performance of the cell lines. A selection of non-animal peptones was evaluated in BD Cell MAb Medium to

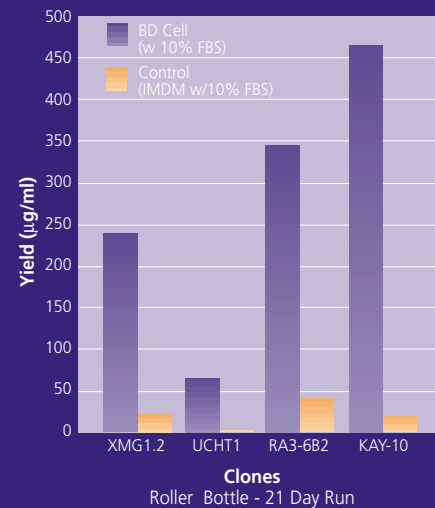


The BD Cell MAb Serum-Free Medium shows similar results when compared to IMDM with serum (data on file).

optimize a cell culture medium that was free of animal components. The soy hydrolysate Select Soytone was chosen based on optimal performance and was used to formulate a BD Cell MAb Medium free of animal-based components.

BD Cell™ MAb Medium

Description	Qty	Cat. No.
Basal Medium	1000 ml bottle	220511
Serum-Free Medium	1000 ml bottle	220509
Animal Component-Free Medium	1000 ml bottle	220513



Yield Analysis of BD Cell Using Protein-G Purification

CELLine™ System: Cultivation Flask for Secreted Product

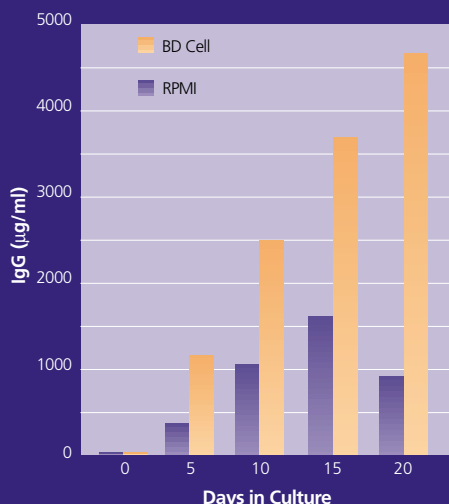
The CELLine™ 1000 Device, based on membrane technology, is a new development in cell cultivation. The system guarantees high cell densities and is easy to use for recombinant protein expression and high yield monoclonal antibody production.

Monoclonal antibodies (MAbs) are becoming increasingly important as research tools. The primary methods available to generate research quantities of MAbs (10 mg to 500 mg) are static tissue culture, spinner or roller systems and ascites fluid from mice. As demand for MAbs has increased, so has the pressure to develop alternative *in vitro* production methods which will reduce animal use, streamline downstream processing and reduce variability in production runs. The effort to develop a production method that meets these emerging requirements has culminated in the CELLine, a novel, membrane-based disposable cell cultivation system.

The CELLine system yields antibody concentrations comparable to that of ascites. One CELLine flask can be used to produce as much antibody as 12 mice. The harvest volumes also result in antibody concentrations that are 50 to 100 times higher than both roller bottles and tissue culture flasks. Average yields of monoclonal antibodies range from 1 to 5 mg/ml. Using BD Cell MAB media in a CELLine device, antibody yields average between 30 to 150 mg of antibody every two weeks.



Description	Qty	Cat. No.
CELLine CL-1000	3 flasks	353137



Antibody production comparing BD Cell Basal Medium with serum in a CELLine Device to RPMI with serum.



CELLine Membrane Technology

Cells are cultured in a 15 ml cultivation chamber separated from the 1000 ml nutrient supply compartment by an upper semi-permeable membrane. Nutrients and other small molecules pass across the semi-permeable, cellulose acetate membrane of the cell compartment. Any cell-secreted product with a molecular weight of over 10,000 Dalton is retained in the growth chamber of the device. The molded silicone membrane on the bottom of the device allows oxygen to reach the cells from underneath. The cells settle upon the bottom of the cell compartment atop of this gas exchange surface, across which oxygen and carbon dioxide rapidly diffuse. This approach leads to high cell concentrations within the small cell compartment volume.

Separate ports provide selective access to the nutrient supply chamber and the cultivation chamber. The solid white cap identifies the cultivation chamber port while a blue vent cap identifies the nutrient supply chamber. The cell chamber is accessed via the cultivation chamber port via a serological pipet. The total system is transparent to allow visibility.



A simple Safety Removal Tool lifts the plastic vessel off the glass slide. The adhesive gasket remains with the vessel, not on the slide, facilitating further processing or placement of coverslips.

BD Falcon™ CultureSlides

BD Falcon™ CultureSlides are comprised of a glass slide prepared to provide a consistent surface for cell growth and a compartmentalized chamber molded from medical-grade polystyrene. BD Falcon CultureSlides have an innovative sealing design that minimizes leakage. CultureSlides allow researchers to culture cells and then analyze them on a glass microscope slide.

Cells are grown in a plastic chamber affixed to a specially cleaned and triple-rinsed glass slide.

Cells can be fixed and stained in place without disruption of the cell monolayer. The chamber is easily and safely removed with an easy-to-use disposable Safety Removal Tool.



Primary bovine aortic endothelial cells grown on BD Falcon CultureSlides and stained with crystal violet. The blue hydrophobic grid defines the cell culture area. A white writing patch provides clear sample identification. Well location numbers etched in the grid are clearly visible.

1-well

Growth Surface Area per Well	Total Volume per Well	Working Volume per Well	Qty/ Pkg	Qty/ Case	Cat. No.
8.6 cm ²	10.0 ml	5.0-6.5 ml	12	96	354101
			12	24	354111

2-wells

Growth Surface Area per Well	Total Volume per Well	Working Volume per Well	Qty/ Pkg	Qty/ Case	Cat. No.
4.0 cm ²	5.0 ml	2.0-2.5 ml	12	96	354102
			12	24	354112

4-wells

Growth Surface Area per Well	Total Volume per Well	Working Volume per Well	Qty/ Pkg	Qty/ Case	Cat. No.
1.7 cm ²	2.5 ml	1.0-1.5 ml	12	96	354104
			12	24	354114

8-wells

Growth Surface Area per Well	Total Volume per Well	Working Volume per Well	Qty/ Pkg	Qty/ Case	Cat. No.
0.7 cm ²	1.2 ml	0.7-0.8 ml	12	96	354108
			12	24	354118

BD Falcon™ Cell Culture Tubes

BD Falcon™ Cell Culture Tubes are TC treated by vacuum-gas plasma and sterilized by gamma irradiation. White polyethylene screw caps distinguish the TC-treated tubes from general-purpose tubes and allow for both open and closed incubation. BD Falcon Cell Culture Tubes are supplied in peel-open, medical-grade packaging. Cross-hatched index marking on the tubes assists researchers in positioning tubes consistently during repeated handling steps.

16 x 125 mm Tube

Qty/Bag	Qty/Case	Cat. No.
25	500	353033



BD Falcon Cell Culture Tubes



Researchers can pick the Cell Scraper blade and handle length that best accommodates their TC flask and individual needs.

BD Falcon™ Cell Scrapers

BD Falcon Cell Scrapers are available in three convenient sizes and are supplied individually in peel-open, medical-style packaging for sterile presentation. The flexible, polystyrene handle is designed with a special texture to ensure a firm grip. The BD Falcon Cell Scraper has been thoughtfully designed to provide maximum accessibility to the growth surfaces in a variety of culture vessels. The pivoting blade provides the correct angle for removal of cells from the entire growth surface.

18 cm Handle, 1.8 cm Blade

Recommended for use with 25 cm² and 12.5 cm² flasks

Qty/Pack	Qty/Case	Cat. No.
1	100	353085

25 cm Handle, 1.8 cm Blade

Recommended for use with 75 cm² flasks

Qty/Pack	Qty/Case	Cat. No.
1	100	353086

40 cm Handle, 3.0 cm Blade

Recommended for use with 150 cm² and 175 cm² flasks and roller bottles

Qty/Pack	Qty/Case	Cat. No.
1	100	353087



*Innovative
BD Falcon
pretested and
certified plastic-
ware for in vitro
fertilization (IVF)*

BD Falcon™ In Vitro Fertilization Plasticware

BD Falcon™ In Vitro Fertilization (IVF) products are the first plasticware available that is certified sterile, non-pyrogenic and nonembryotoxic. These pretested products save time and expense in complying with College of American Pathologists (CAP) and American Fertility Society (AFS) recommended standards for IVF labs.

BD Falcon IVF products are approved as FDA 510k Medical devices and are CE marked by conformance to the European Medical Device Directive.

Each lot of BD Falcon IVF plasticware is tested for embryotoxicity using a 2-cell mouse embryo test. Mouse embryos are isolated at the 2-cell stage from B6C3FL females following superovulation with gonadotropin and mating with BDF1 males. The

IVF products are tested by culturing embryos both in the labware itself and media that has been in contact with the labware for 24 hours at 37°C. Products are deemed nonembryotoxic if they support the growth of more than 75 percent of the embryos to the expanded and/or hatched blastocyst stage.

To improve manipulation of ova and embryos, BD Biosciences designed, in conjunction with embryologists, an innovative 4-well plate. A unique lid reduces the risk of contamination and minimizes evaporation by providing access to two wells at a time while two remain covered. The wells are numbered and a large writing patch allows clear sample identification. Plates are packaged in individual peel-open trays for sterile presentation.

BD Falcon IVF dishes and 4-well plates are manufactured from virgin

crystalline polystyrene tested for USP Class VI cytotoxicity. They have perfectly flat, optically clear surfaces for optimum manipulation and observation of ova and embryos. Lids were designed for aseptic manipulation and consistent venting to maintain humidification.

60 mm Diameter Dish

Well area: 21.29 cm²; Well volume: 23.0 ml

Qty/Pack	Qty/Case	Cat. No.
20	500	353652

1-well Dish, 60 mm Diameter

Well area: 2.89 cm²; Well volume: 2.5 ml;
Total volume: 20 ml

Qty/Pack	Qty/Case	Cat. No.
20	500	353653

4-well Plate

Well area: 1.39 cm²; Well volume: 1.8 ml

Qty/Tray	Qty/Case	Cat. No.
1	100	353654

BD BioCoat™ Cellware is a unique line of TC vessels, including plates, dishes, flasks, cultureslides and coverslips, coated with a variety of extracellular matrix (ECM) proteins and attachment factors. The various ECM components are applied to vessel surfaces by a proprietary manufacturing process resulting in uniform, optically clear matrix substrates. This technology, together with our exacting quality control, guarantees the performance of each lot, as well as consistency from lot to lot.

Cat. No.	Description	Qty/Pack
BD BioCoat Collagen I Cellware		
354400	6-well plates	5
356400	6-well plates	50
354500	12-well plates	5
356500	12-well plates	50
354408	24-well plates	5
356408	24-well plates	50
354505	48-well plates	5
356505	48-well plates	50
354407	96-well clear plates	5
356407	96-well clear plates	50
354649	96-well black/clear plates	5
356649	96-well black/clear plates	50
354650	96-well white/clear plates	5
356650	96-well white/clear plates	50
354519	96-well white plates	5
356519	96-well white plates	50
354666	384-well clear plates	5
356666	384-well clear plates	50
354667	384-well black/clear plates	5
356667	384-well black/clear plates	50
354664	384-well white/clear plates	5
356664	384-well white/clear plates	50
354665	384-well white plates	5
356665	384-well white plates	50
354456	35 mm culture dishes	20
356456	35 mm culture dishes	100
354401	60 mm culture dishes	20
356401	60 mm culture dishes	100
354450	100 mm culture dishes	10
356450	100 mm culture dishes	40
354551	150 mm culture dishes	5
354531	25 cm ² plug-seal flasks [†]	10
356531	25 cm ² plug-seal flasks [†]	50
354484	25 cm ² vented-cap flasks [†]	10
356484	25 cm ² vented-cap flasks [†]	50
354462	75 cm ² plug-seal flasks [†]	5
356462	75 cm ² plug-seal flasks [†]	50
354485	75 cm ² vented-cap flasks [†]	5
356485	75 cm ² vented-cap flasks [†]	50
354645	150 cm ² plug-seal flasks	5
356645	150 cm ² plug-seal flasks	40
354486	150 cm ² vented-cap flasks	5
356486	150 cm ² vented-cap flasks	40
354478	175 cm ² plug-seal flasks	5
356478	175 cm ² plug-seal flasks	40
354487	175 cm ² vented-cap flasks	5
356487	175 cm ² vented-cap flasks	40
354089	22 mm round No. 1 German glass coverslips	60
354556	1-well CultureSlides	12
354627	2-well CultureSlides	12
354557	4-well CultureSlides	12
354630	8-well CultureSlides	12

Cat. No.	Description	Qty/Pack
BD BioCoat Poly-D-Lysine Cellware		
354413	6-well plates	5
356413	6-well plates	50
354470	12-well plates	5
356470	12-well plates	50
354414	24-well plates	5
356414	24-well plates	50
354509	48-well plates	5
356509	48-well plates	50
354461	96-well clear plates	5
356461	96-well clear plates	50
354640	96-well black/clear plates	5
356640	96-well black/clear plates	50
354651	96-well white/clear plates	5
356651	96-well white/clear plates	50
354620	96-well white plates	5
356620	96-well white plates	50
354662	384-well clear plates	5
356662	384-well clear plates	50
354663	384-well black/clear plates	5
356663	384-well black/clear plates	50
354660	384-well white/clear plates	5
356660	384-well white/clear plates	50
354661	384-well white plates	5
356661	384-well white plates	50
354467	35 mm culture dishes	20
356467	35 mm culture dishes	100
354468	60 mm culture dishes	20
356468	60 mm culture dishes	100
354469	100 mm culture dishes	10
356469	100 mm culture dishes	40
354550	150 mm culture dishes	5
354479	25 cm ² plug-seal flasks [†]	10
356479	25 cm ² plug-seal flasks [†]	50
354536	25 cm ² vented-cap flasks [†]	10
356536	25 cm ² vented-cap flasks [†]	50
354524	75 cm ² plug-seal flasks [†]	5
356524	75 cm ² plug-seal flasks [†]	50
354537	75 cm ² vented-cap flasks [†]	5
356537	75 cm ² vented-cap flasks [†]	50
354495	150 cm ² plug-seal flasks	5
356495	150 cm ² plug-seal flasks	40
354538	150 cm ² vented-cap flasks	5
356538	150 cm ² vented-cap flasks	40
354529	175 cm ² plug-seal flasks	5
356529	175 cm ² plug-seal flasks	40
354539	175 cm ² vented-cap flasks	5
356539	175 cm ² vented-cap flasks	40
354077	35 mm coverslip-bottom dishes	20
354086	12 mm round No. 1 German glass coverslips	80
354566	1-well CultureSlides	12
354629	2-well CultureSlides	12
354577	4-well CultureSlides	12
354632	8-well CultureSlides	12

Cat. No.	Description	Qty/Pack
BD BioCoat Poly-L-Lysine Cellware		
354515	6-well plates	5
356515	6-well plates	50
354516	96-well clear plates	5
356516	96-well clear plates	50
354518	35 mm culture dishes	20
356518	35 mm culture dishes	100
354517	60 mm culture dishes	20
356517	60 mm culture dishes	100
354085	12 mm round No. 1 German glass coverslips	80
BD BioCoat Gelatin Cellware		
354652	6-well plates	5
356652	6-well plates	50
354689	96-well plates	5
356689	96-well plates	50
354653	100 mm culture dishes	10
356653	100 mm culture dishes	40
354654	75 cm ² plug-seal flasks [†]	5
356654	75 cm ² plug-seal flasks [†]	50
354488	75 cm ² vented-cap flasks [†]	5
356488	75 cm ² vented-cap flasks [†]	50
BD BioCoat Streptavidin Assay Plates		
354679	96-well clear plates	6
356679	96-well clear plates	60
354677	96-well white plates	6
356677	96-well white plates	60
354678	96-well black plates	6
356678	96-well black plates	60
354684	384-well clear plates	6
356684	384-well clear plates	60
354685	384-well white plates	6
356685	384-well white plates	60
354686	384-well black plates	6
356686	384-well black plates	60
354683	384-well white/clear plates	6
356683	384-well white/clear plates	60
354682	384-well black/clear plates	6
356682	384-well black/clear plates	60
BD BioCoat Collagen IV Cellware		
354428	6-well plates	5
354430	24-well plates	5
354429	96-well plates	5
354459	35 mm culture dishes	20
354416	60 mm culture dishes	20
354453	100 mm culture dishes	10
354554	150 mm culture dishes	5
354534	25 cm ² plug-seal flasks [†]	10
354523	75 cm ² plug-seal flasks [†]	10
354528	175 cm ² plug-seal flasks	5

[†]BD BioCoat 25 cm² flasks are 70 ml canted neck;
BD BioCoat 75 cm² flasks are 250 ml canted neck.

BD BioCoat™ Coated Cultureware

Cat. No.	Description	Qty/Pack
BD BioCoat EHS Matrix Cellware		
354418	6-well plates	5
354419	24-well plates	5
BD BioCoat Laminin Cellware		
354404	6-well plates	5
354502	12-well plates	5
354412	24-well plates	5
354507	48-well plates	5
354410	96-well plates	5
354458	35 mm culture dishes	20
354405	60 mm culture dishes	20
354452	100 mm culture dishes	10
354553	150 mm culture dishes	5
354533	25 cm ² plug-seal flasks [†]	10
354522	75 cm ² plug-seal flasks [†]	10
BD BioCoat Fibronectin Cellware		
354402	6-well plates	5
354501	12-well plates	5
354411	24-well plates	5
354506	48-well plates	5
354409	96-well plates	5
354457	35 mm culture dishes	20
354403	60 mm culture dishes	20
354451	100 mm culture dishes	10
354552	150 mm culture dishes	5
354532	25 cm ² plug-seal flasks [†]	10
354521	75 cm ² plug-seal flasks [†]	10
354646	150 cm ² plug-seal flasks	5
354526	175 cm ² plug-seal flasks	5
354088	22 mm round No.1 German glass coverslips	60
354558	1-well CultureSlides	12
354628	2-well CultureSlides	12
354559	4-well CultureSlides	12
354631	8-well CultureSlides	12

[†]BD BioCoat 25 cm² flasks are 70 ml canted neck;
BD BioCoat 75 cm² flasks are 250 ml canted neck.

Cat. No.	Description	Qty/Pack
BD BioCoat Laminin/Fibronectin Cellware		
354670	96-well plates	5
BD BioCoat Matrigel™ Matrix Cellware		
354432	6-well plates	2
354503	12-well plates	2
354433	24-well plates	2
354508	48-well plates	2
354460	35 mm culture dishes	8
BD BioCoat Matrigel Matrix Cellware – Thin Layer		
354603	6-well plates	5
354605	24-well plates	5
354607	96-well plates	5
354602	35 mm culture dishes	20
354601	60 mm culture dishes	20
354600	100 mm culture dishes	10
BD BioCoat Matrigel Matrix Cellware for Hepatocytes		
354510	6-well plates	5
354634	100 mm culture dishes	5
BD BioCoat Growth Factor Reduced Matrigel Matrix for Smooth Muscle Cells		
354635	24-well plates	5
BD BioCoat Poly-D-Lysine/Laminin Cellware		
354595	6-well plates	5
354619	24-well plates	5
354596	96-well plates	5
354455	100 mm culture dishes	10
354087	12 mm round No.1 German glass coverslips	80
354687	2-well CultureSlides	12
354688	8-well CultureSlides	12

Cat. No.	Description	Qty/Pack
BD BioCoat Poly-L-Ornithine/Laminin Cellware		
354658	6-well plates	5
354659	24-well plates	5
354657	96-well plates	5
Vented Caps for BD BioCoat™ Flasks		
354637	25 cm ² vented caps	100
354638	75 cm ² vented caps	100
354639	175 cm ² vented caps	50
BD BioCoat Variety Pack Cellware		
354417	6-well plates includes: Collagen I, Fibronectin, Laminin, Poly-D-Lysine and BD Falcon™ Plates	5
354431	6-well plates includes: Collagen I, Collagen IV, Fibronectin, Laminin and Poly-D-Lysine Plates	5
354655	2-well CultureSlides includes: Collagen I, Fibronectin, Poly-D-Lysine and BD Falcon CultureSlides	12
354656	8-well CultureSlides includes: Collagen I, Fibronectin, Poly-D-Lysine and BD Falcon CultureSlides	12

To order BD Falcon™ products, contact your authorized distributor.

To order BD BioCoat™, BD Cell™ MAb Medium and CELLLine™, contact our Customer Service Department:

tel: 800.343.2035 or 978.901.7300

fax: 800.743.6200 or 978.901.7493

For technical assistance on BD Falcon or BD BioCoat products, contact our Technical Services Department:

tel: 800.343.2035 or 978.901.7300

fax: 800.743.6200 or 978.901.7493

For technical information on BD Cell MAb Medium, contact our Application Specialist:

800.219.7174 x1933 or 760.788.4577

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