

VWR[®] ESSENTIAL PRODUCTS FOR TISSUE CULTURE

Three Product Lines to Fit All Tissue Culture Applications

Manufactured in a Class 100 Cleanroom Environment

Sterilized by Gamma Irradiation

Certified Non-Pyrogenic

VWR TISSUE CULTURE ESSENTIALS

The VWR Collection has three lines of Tissue Culture essentials to meet your laboratory needs.

- Products with a standard plasma cell culture treatment
- Non-treated cell culture products
- Products with a treatment for increased cell attachment

Flasks, dishes, and multi-well plates are available across all three lines.

VWR[®] TISSUE CULTURE PRODUCTS, PLASMA TREATED

Designed for your routine tissue culture activities, VWR Plasma-Treated Tissue Culture products provide consistent performance at a great value. VWR's flasks, dishes, and plates have been plasma treated to ensure uniform cell adhesion, spreading, and growth. All tissue culture products are manufactured in a Class 100 cleanroom environment, produced with 100% USP VI crystal virgin polystyrene, sterilized by gamma irradiation to 10⁻⁶, and certified non-pyrogenic.

VWR[®] Multi-Well Cell Culture Plates

- · Uniform well volume ensures equal growth surface area
- Raised rims on wells with uniform rings on the lid to reduce evaporation
- · Single position lid reduces the risks of contamination and mishandling
- · Wells with alpha-numeric code for easy identification
- Individually packed in peel-to-open paper/plastic blister pack



Number of Wells

6 12

24

48

96 F

96 U



VWR® Cell Culture Flasks

VWR flasks are perfect for cell growth and cell yields.

Vented caps incorporate a $0.22\mu m$ hydrophobic filter to allow gas exchange and minimize risk of contamination.

Plug seal caps can be used in closed systems (providing a liquid and gas sheer seal) or used in open systems (simply unscrew the cap one-quarter of a turn).

- Innovative angled neck design offers good pipet and cell scraper access
- Upper triangular and wider base shape provides better stability
- Volume graduations on both sides with special writing area
- Packed in zip resealable self-standing bags so the flasks remain upright and the risk of contamination is reduced
- Every inner bag is printed with batch number for traceability
- Available with two different HDPE caps used in both open and closed systems

| Capacity, mL | Growth Area, cm ² | Сар Туре | Cat. No. | Case of |
|--------------|------------------------------|-----------|-----------|---------|
| 25 | 12.5 | Vented | 10062-868 | 200 |
| 25 | 12.5 | Plug-seal | 10062-870 | 200 |
| 50 | 25.0 | Vented | 10062-872 | 200 |
| 50 | 25.0 | Plug-seal | 10062-874 | 200 |
| 250 | 75.0 | Vented | 10062-860 | 100 |
| 250 | 75.0 | Plug-seal | 10062-862 | 100 |
| 600 | 182.5 | Vented | 10062-864 | 40 |
| 600 | 182.5 | Plug-seal | 10062-866 | 40 |
| 850 | 300.0 | Vented | 10062-884 | 18 |
| 850 | 300.0 | Plug-seal | 10062-886 | 18 |



VWR® Tissue Culture Dishes

- Flat bottom, uniform wall thickness ensure distortion-free bottom
- Stacking rings for easier stacking and handling
- 60, 70, and 100 mm dishes are designed with gripping ring
- Packed in zip resealable self-standing bags so that the dishes remain upright and the risk of contamination is reduced
- Every inner bag is printed with batch number for traceability

| Dia., cm | Growth Area, cm ² | Cat. No. | Case of |
|----------|------------------------------|-----------|---------|
| 3.5 | 8.5 | 10062-888 | 960 |
| 6 | 21.2 | 10062-890 | 600 |
| 7 | 36.3 | 10062-876 | 600 |
| 9 | 55.0 | 10062-878 | 500 |
| 10 | 60.8 | 10062-880 | 300 |
| 15 | 143.0 | 10062-882 | 120 |

VWR® TISSUE CULTURE PRODUCTS, PLASMA TREATED





VWR® Tissue Culture Plate Inserts

Clear, sterile, general polystyrene (GPPS) with polycarbonate (PC) or polyester (PET) membrane are treated for optimal cell attachment. The plate inserts are sterile and assembled with 6-, 12-, or 24-well plates and resist most fixing and staining agents.

They are manufactured in a class 100,000 cleanroom environment under EN ISO13485:2003 and ISO9001:2008 quality management system.

Temperature range: -20°C to +50°C

- Non-pyrogenic
- Sterilized by gamma irradiation SAL 10⁻⁶ (ISO11137)
- Shelf life: 3 years after month of production
- Non-autoclavable

| Membrane Dia., mm | Membrane Type | Pore Size, µm | Growth Area, cm ² | Cat. No. | Inserts/Plate | Plates/Case |
|-------------------|---------------|---------------|------------------------------|-----------|---------------|-------------|
| 6-Well Plates | | | | | | |
| 24 | PET | 0.1 | 4.78 | 10769-182 | 6 | 24 |
| 24 | PET | 0.4 | 4.78 | 10769-192 | 6 | 24 |
| 24 | PET | 1.0 | 4.78 | 10769-184 | 6 | 24 |
| 24 | PET | 3.0 | 4.78 | 10769-194 | 6 | 24 |
| 24 | PET | 8.0 | 4.78 | 10769-196 | 6 | 24 |
| 24 | PC | 0.1 | 4.78 | 10769-176 | 6 | 24 |
| 24 | PC | 0.4 | 4.78 | 10769-186 | 6 | 24 |
| 24 | PC | 1.0 | 4.78 | 10769-178 | 6 | 24 |
| 24 | РС | 3.0 | 4.78 | 10769-188 | 6 | 24 |
| 24 | PC | 8.0 | 4.78 | 10769-190 | 6 | 24 |
| 24 mm | PC | 12.0 | 4.78 | 10769-180 | 6 | 24 |
| 12-Well Plates | | | | | | |
| 12 | PET | 0.1 | 1.12 | 10769-204 | 12 | 48 |
| 12 | PET | 0.4 | 1.12 | 10769-214 | 12 | 48 |
| 12 | PET | 1.0 | 1.12 | 10769-206 | 12 | 48 |
| 12 | PET | 3.0 | 1.12 | 10769-216 | 12 | 48 |
| 12 | PET | 8.0 | 1.12 | 10769-218 | 12 | 48 |
| 12 | PC | 0.1 | 1.12 | 10769-198 | 12 | 48 |
| 12 | PC | 0.4 | 1.12 | 10769-208 | 12 | 48 |
| 12 | PC | 1.0 | 1.12 | 10769-200 | 12 | 48 |
| 12 | PC | 3.0 | 1.12 | 10769-210 | 12 | 48 |
| 12 | PC | 8.0 | 1.12 | 10769-212 | 12 | 48 |
| 12 | PC | 12.0 | 1.12 | 10769-202 | 12 | 48 |
| 24-Well Plates | | | | | | |
| 6.5 | PET | 0.1 | 0.33 | 10769-226 | 12 | 48 |
| 6.5 | PET | 0.4 | 0.33 | 10769-238 | 12 | 48 |
| 6.5 | PET | 1.0 | 0.33 | 10769-228 | 12 | 48 |
| 6.5 | PET | 3.0 | 0.33 | 10769-240 | 12 | 48 |
| 6.5 | PET | 8.0 | 0.33 | 10769-242 | 12 | 48 |
| 6.5 | PC | 0.1 | 0.33 | 10769-220 | 12 | 48 |
| 6.5 | PC | 0.4 | 0.33 | 10769-230 | 12 | 48 |
| 6.5 | PC | 1.0 | 0.33 | 10769-222 | 12 | 48 |
| 6.5 | PC | 3.0 | 0.33 | 10769-232 | 12 | 48 |
| 6.5 | PC | 5.0 | 0.33 | 10769-236 | 12 | 48 |
| 6.5 | PC | 8.0 | 0.33 | 10769-234 | 12 | 48 |
| 6.5 | PC | 12.0 | 0.33 | 10769-224 | 12 | 48 |



VWR® TISSUE CULTURE PRODUCTS FOR INCREASED CELL ATTACHMENT

The VWR Tissue Culture Products for Increased Cell Attachment line can improve cell spreading and attachment. These products are suitable for the cells that may adhere poorly due to cell phenotype, stressful culture conditions, or those which normally require additional biological coatings for attachment. This special surface treatment will increase the hydrophilic level of the surface to reach a water drop contact angle at less than 10 degrees. The increased hydrophilic surface will allow a wider range of cells to be easily attached to the surface of our culture products, especially sensitive cells such as neuronal cells and primary cell lines.

All Tissue Culture products are manufactured in a Class 100 cleanroom environment, produced with 100% USP VI crystal virgin polystyrene, sterilized by gamma irradiation to 10⁻⁶ and certified non-pyrogenic. Treated products have a plasma treatment that ensures consistent cell attachment, spreading, and growth. Our collection provides a great value for your tissue culture work, allowing you to maximize your budget.

Side-by-Side Testing of VWR Plasma Treated Vs. VWR Increased Cell Attachment Products



3T3 96-Well Plate - VWR, Normal



3T3 96-Well Plate - VWR, Cell-Attach, Sprayed, After Aging Test



LNCaP-A 50 ml Flask - VWR, Normal



LNCaP-A 50 ml Flask - VWR, Cell-Attach, Sprayed, After Aging Test



293T 6-Well Plate - VWR, Normal



293T 6-Well Plate - VWR, Cell-Attach, Sprayed, After Aging Test

VWR[®] Cell Culture Plates Treated for Increased Cell Attachment

- Available with six different growth surface areas
- Uniform well volume ensures an equal growth surface area
- Flat well bottom and round bottom plates available
- · Well surface is smooth and free from striation to maximize usable growth area
- · Raised rims on wells with uniform rings on the lid to reduce evaporation
- · Single position lid reduces the risk of cross-contamination and handling mistakes
- Wells are labeled with alphanumeric code for easy identification
- Suitable for all common instruments and automation



| | Max. Well Volume, mL | Working Volume, mL | Growth | | |
|-----------------|----------------------|--------------------|-----------|-----------|---------|
| Number of Wells | (Single Well) | (Single Well) | Area, cm² | Cat. No. | Case of |
| 6 | 17.00 | 1.90 - 2.90 | 9.60 | 10861-696 | 100 |
| 12 | 6.80 | 0.76 - 1.14 | 3.85 | 10861-698 | 100 |
| 24 | 3.50 | 0.38 – 0.57 | 1.93 | 10861-700 | 100 |
| 48 | 1.55 | 0.19 - 0.29 | 0.84 | 10861-702 | 100 |
| 96 F | 0.39 | 0.075 - 0.20 | 0.33 | 10861-666 | 100 |
| 96 U | 0.32 | 0.32 | 0.32 | 10861-668 | 100 |

VWR[®] Cell Culture Dishes for Increased Cell Attachment

- Available with six different diameters
- Flat bottom, uniform wall thickness ensures distortion-free bottom
- Rim on the bottom side of the lid mates with the dish brim for easy and secure stacking
- Numeric scale divides dish into quadrants for easy orientation

| Dia., cm | Growth Area, cm ² | Cat. No. | Case of |
|----------|------------------------------|-----------|---------|
| 3.5 | 8.5 | 10861-656 | 240 |
| 6 | 21.2 | 10861-658 | 240 |
| 7 | 36.3 | 10861-660 | 240 |
| 9 | 55 | 10861-662 | 240 |
| 10 | 60.8 | 10861-680 | 240 |
| 15 | 143 | 10861-682 | 80 |



VWR® Cell Culture Flasks for Increased Cell Attachment

- · Available with five different growth areas
- · Flask surface is flat and free from striation to maximize usable growth area
- Two different cap styles can be used in both open and closed systems
- Innovative angled neck design offers good pipet and cell scraper access
- · Triangular top with wide base provides stability
- · Protruding ridge on the back side of the flask enables easy stacking
- · Special area near the neck for easy marking/writing
- Engraved graduations on multiple sides
- Strict integrity tested

| Capacity, mL | Growth Area, cm ² | Сар Туре | Cat. No. | Case of |
|--------------|------------------------------|-----------|-----------|---------|
| 25 | 12.5 | Vented | 10861-670 | 200 |
| 25 | 12.5 | Plug-seal | 10861-672 | 200 |
| 50 | 25.0 | Vented | 10861-640 | 200 |
| 50 | 25.0 | Plug-seal | 10861-642 | 200 |
| 250 | 75.0 | Vented | 10861-644 | 100 |
| 250 | 75.0 | Plug-seal | 10861-646 | 100 |
| 600 | 182.5 | Vented | 10861-648 | 40 |
| 600 | 182.5 | Plug-seal | 10861-650 | 40 |
| 850 | 300.0 | Vented | 10861-652 | 18 |
| 850 | 300 | Plug-seal | 10861-654 | 18 |





VWR® TISSUE CULTURE PRODUCTS, NON-TREATED

VWR's Non-Treated Tissue Culture Products have been designed for use in cell suspension applications where cell attachment is not desired. The crystal clear non-treated hydrophobic surface will minimize the attachment for suspension cells and maximize their overall viability. All non-treated plates, dishes, and flasks are sterilized by gamma irradiation and are non-pyrogenic.

VWR® Tissue Culture Plates, Non-Treated

- · Available with eight different growth surface areas
- Uniform well volume
- Flat well bottom and round bottom plates available
- Well surface is smooth and free from striation
- Alphanumerically coded for easy identification
- Suitable for all common instruments and automation

| | | | Growth | | |
|--------------|------------------------------------|----------------------------------|-----------|-----------|---------|
| No. of Wells | Max. Well Volume, mL (Single Well) | Working Volume, mL (Single Well) | Area, cm² | Cat. No. | Case of |
| 1 | 73 | 10-40 | 97 | 75780-348 | 100 |
| 4 | 1.813 | 1 | 1.96 | 10813-630 | 100 |
| 6 | 17 | 0.76-1.14 | 3.85 | 10861-554 | 100 |
| 12 | 6.8 | 0.38-0.57 | 1.93 | 10861-556 | 100 |
| 24 | 3.5 | 0.19-0.29 | 0.84 | 10861-558 | 100 |
| 48 | 1.55 | 0.075-0.20 | 0.33 | 10861-560 | 100 |
| 96 F | 0.39 | 0.075-0.20 | 0.32 | 10861-562 | 100 |
| 96 U | 0.32 | 1.90–2.90 | 9.6 | 10861-564 | 100 |
| 384 | 0.127 | 0.01-0.1 | 0.1135 | 10814-224 | 100 |

VWR® Tissue Culture Dishes, Non-Treated

- Available with six different diameters
- Dish surface is smooth and free from striation
- · Easy and secure stacking

| Dia., cm | Growth Area, cm ² | Cat. No. | Case of |
|----------|------------------------------|-----------|---------|
| 3.5 | 8.5 | 10861-586 | 960 |
| 6 | 21.2 | 10861-588 | 600 |
| 7 | 36.3 | 10861-590 | 600 |
| 9 | 55 | 10861-592 | 500 |
| 10 | 60.8 | 10861-594 | 300 |
| 15 | 143 | 10861-596 | 120 |



VWR® Tissue Culture Flasks, Non-Treated

• Available with five different volume ranges

- Flask surface is flat and free from striation to maximize usable growth area
- Two different cap styles can be used in both open and closed systems
- Innovative angled neck design offers good pipet and cell scraper access
- Triangular top with wide base provides stability
- Protruding ridge on the back side of the flask facilitates stacking
- Special area near the neck for easy marking/writing
- Engraved graduations on multiple sides
- Strict integrity tested

| | Working | | | |
|--------------|------------|-----------|-----------|---------|
| Capacity, mL | Volume, mL | Сар Туре | Cat. No. | Case of |
| 25 | 20 | Plug Seal | 10861-566 | 200 |
| 25 | 20 | Vent | 10861-568 | 200 |
| 50 | 40 | Plug Seal | 10861-570 | 200 |
| 50 | 40 | Vent | 10861-572 | 200 |
| 250 | 175 | Plug Seal | 10861-574 | 100 |
| 250 | 175 | Vent | 10861-576 | 100 |
| 600 | 400 | Plug Seal | 10861-578 | 40 |
| 600 | 400 | Vent | 10861-580 | 40 |
| 850 | 800 | Plug Seal | 10861-582 | 18 |
| 850 | 800 | Vent | 10861-584 | 18 |

VWR® ROLLER BOTTLES



VWR® Roller Bottles

These clear polystyrene, non-pyrogenic bottles have a silk-printed graduated scale and include high-density polyethylene caps.

They are manufactured in a class 100,000 cleanroom environment under EN ISO13485:2003 and ISO9001:2008 quality management system. Each package case has a labeled lot number. Temperature Range: -20°C to +50°C

- Sterilized by gamma irradiation; SAL 10⁻⁶ (ISO11137)
- Shelf life: 3 years after month of production
- Non-autoclavable

| Capacity, mL | Cell Growth Area, cm ² | Cap Style | Cat No. | Bottle/Bag | Bottles/Case |
|--------------|-----------------------------------|-----------|-----------|------------|--------------|
| 1000 mL | 490 | Plug Seal | 10769-794 | 2 | 40 |
| 2000 mL | 850 | Plug Seal | 10769-800 | 2 | 40 |
| 2000 mL | 850 | Plug Seal | 10769-798 | 5 | 40 |
| 2000 mL | 850 | Plug Seal | 10769-796 | 20 | 20 |
| 2000 mL | 1900 | Vented* | 10769-802 | 5 | 40 |

*0.22µm Hydrophobic Membrane for use with vented cap only

VWR® Cell Scrapers

Specially developed to make the process of scraping off and collecting cells easier and more effective. Available with two blade positions: scraper for use in flasks and lifter for use in harvesting cells (specifically stem cells) in dishes.

- Cross-ribbed handle in ABS provides a greater rigidity and ensures a better control while scraping cells
- Thin, flexible blade in TPE prevents damaging cells
- Individually wrapped
- Sterilized by gamma irradiation
- Non-pyrogenic



Cell Scraper for Flasks

Cell Scraper for Dishes

| Description | Blade Position | Length, cm (in.) | Blade Width, mm | Cat. No. | Case of |
|-------------------------|----------------|-------------------------|-----------------|-----------|---------|
| Cell Scraper for Dishes | Lifter | 25 (9 ⁷ /8) | 20 | 10062-906 | 100 |
| Cell Scraper for Dishes | Lifter | 39 (15 ³ /8) | 30 | 10062-910 | 100 |
| Cell Scraper for Flasks | Scraper | 25 (97/8) | 20 | 10062-904 | 100 |
| Cell Scraper for Flasks | Scraper | 39 (15 ³ /8) | 30 | 10062-908 | 100 |

VWR® EQUIPMENT FOR CELL CULTURE



VWR® Storage/Media Bottles

VWR[®] Storage/Media Bottles are designed with a wide opening (30mm I.D.) and a drip-free polypropylene pour ring. They feature enhanced graduations and marking spots printed in permanent white enamel. Bottles are manufactured from borosilicate glass and can be autoclaved to 180°C (356°F). Bottles come with standard GL45 polypropylene caps.

- Wide mouth opening with drip-free pour ring
- Borosilicate glass construction
- Enhanced graduations
- Autoclavable

| Capacity | Graduation Interval, mL | Graduation Range, mL | Cat. No. | Case of |
|-------------------|-------------------------|----------------------|-----------|---------|
| 100 mL (3.4 oz.) | 10 | 20-80 | 10754-814 | 10 |
| 250 mL (8.4 oz.) | 25 | 50–200 | 10754-816 | 10 |
| 500 mL (16.9 oz.) | 50 | 100-400 | 10754-818 | 10 |
| 1 L (33.8 oz.) | 50 | 100–900 | 10754-820 | 10 |
| 2 L (67.6 oz.) | 100 | 400-1800 | 10754-822 | 10 |
| 5 L (1.3 gal.) | 250 | 1000-4500 | 10754-824 | 1 |
| 10 L (2.6 gal.) | 500 | 2000-9000 | 10754-826 | 1 |
| | | | | |





VWR® Inverted Microscopes

The VWR Inverted Microscope is the ideal device for live cell and advanced applications. The VWR Inverted Fluorescence Microscope is ideal for applications in biology, cell cytology, genetics, oncology, and immunology. Both are also well suited for research, universities, routine laboratory, and medical demands.

- Trinocular Siedentopf tube with 45° inclination
- One-year warranty on electrical parts
- Five-year warranty on mechanical parts and optics

| Description | Cat. No. | Unit |
|--------------------------------------|-----------|------|
| VWR Inverted Microscope | 89404-462 | Each |
| VWR Inverted Fluorescence Microscope | 89404-464 | Each |



VWR® General-Purpose Water Baths

Versatile general-purpose water bath with digital display, programmable timer, programmable high limit, programmable calibration/temperature offset, three programmable preset temperatures, and audible alarm standard.

- VWR two-year warranty
- Comes with a high clearance lid
- Three user configured temperature presets
- Built-in countdown timer

| Capacity | Overall Dimensions | Working Dimensions | Cat. No. | Unit |
|----------|---|---|-----------|------|
| 5 L | 36.8L x 30.5W x 34.3H cm (14.5 x 12 x 13.5") | 12.7L x 27.4W x 14.0D cm (5 x 10.8 x 5.5") | 89501-464 | Each |



VWR® General Purpose Centrifuge Cell Culture Package

- Robust & steady, temperature control system; refrigerated unit features a pre-cool function from -20 to +40 °C
- Quiet operation (as quiet as normal conversation)
- FDA registered centrifuge manufacturer
- Speed: 45,000 rpm
- RCF: 3,260 g
- Five-year warranty

Centrifuge package includes: centrifuge, horizontal rotor, four buckets, and eight 15mL adapters. Rotor package includes: swing-out rotor, four buckets, and eight adapters and inserts for 15/50mL conical tubes

| Descri | |
|--------|--|
| | |
| | |

| Description | Cat. NO. |
|--|-----------|
| General Purpose Centrifuge Package, Ambient | 10830-762 |
| General Purpose Centrifuge Package, Refrigerated | 10830-764 |
| Cell Culture Rotor Package | 10830-778 |

VWR® Advanced 3500 Orbital Shaker and Dura-Shaker

The VWR® Advanced 3500 Orbital Shakers and Dura-Shakers are designed for a wide range of applications including cell cultures that require CO₂ and humidity for optimal cell growth. The Dura-Shaker is designed to withstand 100% humidity. The microprocessor control provides consistent uniform shaking while safely ramping to the set speed. Distinctive operational features include the exclusive Accu-Drive Shaking System, which delivers exceptional speed control, accuracy, and durability. The system continuously monitors shaking speed and maintains set-point, even under changing loads.

- · Dura-shaker's remote controller magnetically attaches to most incubators
- Exclusive Accu-Drive® shaking system
- · Five-year warranty on parts and labor



| Description | Dimensions | Orbit Size, mm (in.) | Speed Range, rpm | Cat. No. | Unit |
|----------------------------|---|------------------------|------------------|-----------|------|
| Model 3500 Advanced Shaker | 41.3L x 35.6W x 14.6H cm (16¼ x 14 x 5¾"), overall | 19 (³ /4") | 15–500 | 89032-096 | Each |
| Dura-Shaker | 30.1L x 35.6W x 15.4H cm (117/8 x 14 x 61/8") Shaker; 13.5L x 35.6W x 11.6H cm (55/16 x 14 x 45/8") Remote (overall) | 19 (3/4") | 15-500 | 10159-960 | Each |

All You Need for Life Science

At VWR, we enable Life Science throughout the world by providing the power of choice with over 5 million products for our customers. You will find new tools and products in the All You Need areas for the workflows of Cell Biology, Genomics, Proteomics, and Microbiology.





VWR® Air Jacketed CO2 Incubators

- 6.5 cu. ft. internal volume
- · Removable water pan and four shelves included
- In-chamber HEPA filtration airflow designed to protect samples from airborne contaminants during routine access
- Overnight 140°C sterilization cycle for easy cleaning and reliable decontamination
- In-chamber probes and sensors for precise control
- Choice of long lasting TC or independent IR CO_2 sensor
- · Easy assembly and disassembly of interior without tools
- Dual stack configurations include mobile support stand and stacking kit to maximize lab space
- Three-year part and labor warranty

| VWR | |
|-----|--|
| | |
| | |
| | |
| | |
| | |

| Description | Cat. No. |
|----------------|-----------|
| TC Sensor | 10810-902 |
| IR Sensor | 10810-944 |
| Dual TC Sensor | 10811-002 |
| Dual IR Sensor | 10811-004 |



VWR® Manual Defrost Laboratory Freezer

The VWR Series Manual Defrost Laboratory Freezer is purpose built for critical cold storage applications, but where built-in data logging functionality may not be a necessity. The all-new temperature display and alarm module offers an array of robust security features with a monitoring and alarm.

| Electrical | Capacity | Exterior Dimensions | No. of Shelves | Cat. No. |
|----------------|--------------------|--|----------------|-----------|
| 115V, 60Hz, 5A | 566 L (20 cu. ft.) | 34W x 32 ³ / ₄ D x 73 ¹ / ₄ H" | 4 | 10819-388 |

VWR® Ultra-Low Temperature Upright Freezer

VWR[®] Ultra-Low Temperature Upright Freezers are designed and constructed for long-term performance, and they represent the leading choice of laboratory professionals for applications where temperature control is critical.

- Microprocessor temperature control system
- Advanced monitor/alarm system
- Automatic voltage compensator
- Cascade refrigeration system
- Non-CFC, Non-HFCF, nonflammable refrigerants

| | | | | Amps/ | | |
|------------|--------------------|--------------------------------------|------------------------------|---------|-----------|------|
| Electrical | Capacity | Exterior Dimensions | Temperature Range | Breaker | Cat. No. | Unit |
| 120V, 60Hz | 651 L (23 cu. ft.) | 104W x 198H x 94D cm (41 x 78 x 37") | -86 to -50°C (-123 to -58°F) | 16/20 | 10160-732 | Each |



Universal Features

- Performance & Quality Unlike Any Other
- Options for Every Application & Budget
- ISIA Certified Traceability

Ultimate Grade FBS

The ultimate in product quality and viral safety, this grade undergoes additional BVD virus testing using qPCR technology. Proprietary collection and production techniques provide additional features that elevate product quality, enhance traceability, and improve regulatory compliance.



Used by cell culturists who work with primary or sensitive cells, work in production environments, have regulatory or traceability concerns, or

have strict evaluation criteria. Ultimate grade is 100% US origin.

Premium Grade FBS

Offers unique quality features like complete testing by independent, third-party laboratories and ISIA-certified raw material traceability that elevate it above comparable products from other serum suppliers.

Universally used by cell culturists who require a high quality, high performance product for a wide variety of applications. Premium grade is 100% US origin.

Ultra Low IgG FBS

Ultra Low IgG FBS is purified of immunoglobulin (IgG) using a chromatographic process that delivers significantly reduced levels of IgG ($\leq 5\mu$ g/mL). Ideal for cell culture and protein purification applications where naturally occurring levels of IgG are too high. Ultra Low IgG FBS is 100% US origin.

| Ultimate | e Grade | | Premiur | n Grade FBS | | Ultra Lo | ow IgG FBS | |
|----------|-------------------------|-----------|---------|-------------------------|-----------|----------|-------------------------|-----------|
| Size | Additional Treatment | Cat. No. | Size | Additional Treatment | Cat. No. | Size | Additional Treatment | Cat. No. |
| 50mL | None | 89510-198 | 50mL | None | 89510-194 | 50mL | None | 10018-828 |
| 50mL | Heat Inactivated | 89510-200 | 50mL | Heat Inactivated | 89510-196 | 50mL | Heat Inactivated | 10018-832 |
| 500mL | None | 97068-101 | 500mL | None | 97068-085 | 500mL | None | 10018-826 |
| 500mL | Heat Inactivated | 97068-107 | 500mL | Heat Inactivated | 97068-091 | 500mL | Heat Inactivated | 10018-830 |

Gamma irradiation available upon request.



1.800.932.5000 vwr.com

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[†]International Serum Industry Association (serumindustry.org)

The care and attention devoted to the manufacture of VWR Life Science Seradigm serum products generates final test results that are substantially lower than set specifications. See lot-specific Certificates of Analysis for actual test results.