

cultivate consistency

Comprehensive solutions for thriving cell cultures

Discovery requires a solid foundation. From cell preparation and growth to investigation and analysis, our comprehensive portfolio provides the quality and consistency to ensure meaningful, reproducible results.

Advance your research with consistent and comprehensive cell culture solutions.

Discover more at: SigmaAldrich.com/cellculture

Sigma-Aldrich® Lab & Production Materials

Millipore®

Preparation, Separation, Filtration & Monitoring Products

The Life Science business of Merck operates as MilliporeSigma in the U.S. and Canada



Prepare Cells Buffers & Salts

Cell culture media variations have been refined in response to the need for physiologicallyrelevant environments for diverse mammalian cell cultures. These media and salts, along with their components, have been qualified for cell culture applications, and are manufactured in our state-of-the art facilities.

You'll find the correct formulation for your culture application in the most complete collection of balanced salts available anywhere.

Popular Buffers

Product No.	Product Name	Description
D8537	Dulbecco's Phosphate Buffered Saline	Modified, without calcium chloride and magnesium chloride, liquid, sterile-filtered, suitable for cell culture
D1408	Dulbecco's Phosphate Buffered Saline, 10x	10×, Modified, without calcium chloride and magnesium chloride, liquid, sterile- filtered, suitable for cell culture
E2888	Earle's Balanced Salts	With sodium bicarbonate, liquid, sterile-filtered, suitable for cell culture
E7510	Earle's Balanced Salt Solution 10x	Without sodium bicarbonate, $10 \times$, liquid, sterile-filtered, suitable for cell culture
H6648	Hanks' Balanced Salt Solution	Modified, with sodium bicarbonate, without phenol red, calcium chloride and magnesium sulfate, liquid, sterile-filtered, suitable for cell culture
H8264	Hanks' Balanced Salt Solution	Modified, with sodium bicarbonate, without phenol red, liquid, sterile-filtered, suitable for cell culture
T2397	Tyrode's Salts	With sodium bicarbonate, liquid, sterile-filtered, suitable for cell culture
T2145	Tyrode's Salts	Without sodium bicarbonate, powder, suitable for cell culture



View the entire Buffers portfolio here!



Prepare Cells Sterile Filtration

Stericup[®] and Steritop[®] Quick Release Filter Units

Stericup[®] filtration devices have been the most trusted systems in media and buffer filtration for decades. The next-generation Stericup[®] Quick Release vacuum filtration devices present ergonomic design updates that optimize usability and streamline the filtration process, while protecting essential cell cultures with the renowned performance of Millipore[®] membranes.

Feeling Green? Stericup[®] and Steritop[®] E Filters Use Less Plastic and Packaging

Stericup[®] E and Steritop[®] E filters provide the same steadfast sterile filtration cell culturists worldwide have chosen for decades—but attach directly to commercial media bottles, eliminating the plastic filter funnel to reduce plastic waste up to 48%.

Our most popular Stericup[®] Filtration Systems

Product No.	Product Name	Description
S2GPU11RE	Stericup [®] Quick Release-GP Sterile Vacuum Filtration System	1000 mL process volume, 0.22 μm pore size, polyethersulfone membrane, pkg of 12, radio-sterilized
S2GPU05RE	Stericup [®] Quick Release-GP Sterile Vacuum Filtration System	500 mL process volume, 0.22 μm pore size, polyethersulfone membrane, pkg of 12, radio-sterilized
SCGP00525	Steriflip [®] -GP Sterile Centrifuge Tube Top Filter Unit	Sterile, 50 mL process volume, 0.22 μm pore size, polyethersulfone membrane, sterilized by gamma irradiation
SEGPT0038	Steritop® E-GP Eco-friendly Filter Unit	38 mm threaded collar, 150-1000 mL process volume, 0.2 μm pore size, fast flow PES Express Plus membrane, pkg of 12, radio-sterilized
SEGPT0045	Steritop® E-GP Eco-friendly Filter Unit	45 mm threaded collar, 150-1000 mL process volume, 0.2 μm pore size, fast flow PES Express Plus membrane, pkg of 12, radio-sterilized
SEGPU0538	Stericup [®] E-GP Eco-friendly Filter Unit	$38~\text{mm}$ threaded collar, $500~\text{mL}$ process volume, $0.2~\mu\text{m}$ pore size, fast flow PES Express Plus membrane, pkg of 12, radio-sterilized
SEGPU0545	Stericup [®] E-GP Eco-friendly Filter Unit	45 mm threaded collar, 500 mL process volume, 0.2 μm pore size, fast flow PES Express Plus membrane, pkg of 12, radio-sterilized
SEGPU1138	Stericup [®] E-GP Eco-friendly Filter Unit	38 mm threaded collar, 1000 mL process volume, 0.2 μm pore size, fast flow PES Express Plus membrane, pkg of 12, radio-sterilized
SEGPU1145	Stericup [®] E-GP Eco-friendly Filter Unit	45 mm threaded collar, 1000 mL process volume, 0.2 μm pore size, fast flow PES Express Plus membrane, pkg of 12, radio-sterilized
SLGPR33RS	Millex [®] 33mm PES .22 µm Sterile 50/pk RUO	33 mm diameter sterile syringe filter with a 0.22 μm pore size hydrophilic Polyethersulfone (PES) membrane



Stericup® E and Steritop® E filters



View the entire Stericup[®] Filtration portfolio here!





Prepare Cells Cells & Cell Lines

PromoCell® Human Primary Cells

This collection offers a broad range of validated, ethicallysourced human primary and stem cells along with media optimized for expert culture of these cell types.

- Cells can be selected, reserved and ordered based on donor-specific criteria to meet experimental needs
- Primary cell culture protocols, plus advanced media and reagents for 3D culture from patient cancers
- Human primary cells are ethically collected with donor documentation, and validated for identity with definitive phenotypic markers

BioIVT Peripheral Blood Mononuclear Cells (PBMCs) and Immune Cell Subsets

In partnership with BioIVT, we offer a comprehensive portfolio of ready-to-use normal and disease state PBMCs as well as a wide variety of pre-isolated immune cell subtypes.

- Cryopreserved; ready when you need them
- Normal and disease state PBMCs
- Immune cell subsets include B cells, T cells, and NK cells
- Fully characterized
- HLA typing available for many cell types
- Collections conducted under IRB-approved protocols
- Potential to recall donors if an additional sample is required

ECACC Immortalized Cell Lines

We partnered with the European Collection of Authenticated Cell Cultures (ECACC) repository, part of Public Health England, to offer quality-controlled cell lines and nucleic acids to laboratories around the world. Browse our portfolio of authenticated, validated, mycoplasma-free cell lines for biomedical research, protein production, hybridoma fusion, virus propagation, and more.

- > 1,300 cell lines
- Originating from > 45 different species
- 180 different tissue types including skin, blood, lung, breast, ovary, esophagus, brain, cervix, colorectal, heart, liver, kidney, neural, prostate, pancreas, urogenital and gastrointestinal
- Human cell lines are from a wide variety of normal and diseased tissues and include >600 cancer cell lines
- In addition to cryopreserved cell lines, we also provide nucleic acids (DNA, RNA or cDNA) derived from the cell lines and arrays of nucleic acids derived from multiple cell lines

View our complete Cell Lines & Specialty Cell Culture offerings here!

Merck

Transfect Transfection Reagents



X-TremeGENE™ Transfection Reagents

High-efficiency transfection in nearly any cell type can be achieved with the wide variety of reagents that are currently available. We cover a variety of popular transfection reagents, including our Escort[™] lipid reagents, NeuroPorter[™] neuronal-specific reagent, X-tremeGENE[™], and GeneJuice[®] transfection reagents.

X-TremeGENE[™] Transfection Reagents

Roche, X-tremeGENE[™], transfection reagents provide efficient delivery of DNA, siRNA, miRNA, and CRISPR/Cas9 components for common and difficult-to-transfect cell lines. The X-tremeGENE[™] products are easy to optimize for your application needs and produce minimal toxicity.

Popular Transfection Reagents

Product No.	Product Name	Description
XTG360-RO	X-tremeGENE™ 360 Transfection Reagent	Universal polymer reagent for delivering DNA, siRNA, miRNA and CRISPR/RNP to many cell lines
XTG9-RO	X-tremeGENE™ 9 DNA Transfection Reagent	Polymer reagent for transfecting common cell lines
XTGHP-RO	X-tremeGENE [™] HP DNA Transfection Reagent	High-performance polymer reagent for transfecting many cell lines
L3037	Escort [™] III Transfection Reagent	Lipid reagent for transfecting sensitive and primary cells
L3287	Escort [™] IV Transfection Reagent	Lipid reagent for transient and stable transfection of mammalian and insect cells
TR-1003-G	Polybrene Transfection Reagent	A highly efficient method of gene transfer into mammalian cells leveraging infection with retroviral vectors
70967	GeneJuice [®] Transfection Reagent	Non-lipid based chemical transfection reagent optimized for maximum transfection efficiency, ease- of-use, and minimal cytotoxicity on a wide variety of mammalian cells
NPT01	NeuroPorter [™] Transfection Kit	Lipid formulation for nucleic acid transfections in neuronal and glial cells

View the entire Transfection Reagents portfolio here!



Transfect Selection Antibiotics



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Select the right antibiotics for your cell culture projects to select genetic markers and other cell biology studies with our wide variety of effective antibiotics. Antibiotics are available in powder or ready-made solutions in varying concentrations for reliable results in your lab.

Popular Selection Antibiotics

Product No.	Product Name	Description
B8416	Bleomycin Sulfate from Streptomyces Verticillus	1.5-2.0 units/mg solid, BioReagent, suitable for cell culture
G8168	G 418 Disulfate Salt Solution	50 mg/mL in H2O, 0.1 μm filtered, BioReagent, suitable for cell culture
A1720	G 418 Disulfate Salt	Powder, BioReagent, suitable for cell culture
P8833	Puromycin Dihydrochloride from Streptomyces Alboniger	Powder, BioReagent, suitable for cell culture
M4287	Mitomycin C from Streptomyces Caespitosus	Powder, BioReagent, suitable for cell culture
N1142	Neomycin Solution	with 10 mg/mL neomycin in 0.9% NaCl, 0.1 μm filtered, BioReagent, suitable for cell culture
K0129	Kanamycin Solution from Streptomyces Kanamyceticus	10 mg/mL in 0.9% NaCl, 0.1 μm filtered, BioReagent, suitable for cell culture
K0254	Kanamycin Solution from Streptomyces Kanamyceticus	50 - 60 mg/mL in 0.9% NaCl, BioReagent, liquid, 0.1 μm filtered, suitable for cell culture



View our complete Antibiotics offering here!



Grow Cells Classical Media

Cell Culture Media

Support the growth of your cells with our comprehensive classical and specialty media options in ready-to-use liquid or reconstitutable formats that are manufactured in our state-of-the art facilities. Cell Culture media variations have been refined in response to the need for physiologically-relevant environments for diverse mammalian cell cultures.

Choose media fit for your application. View the most popular Media below

Product No.	Product Name	Description
D5671	Dulbecco's Modified Eagle's Medium - high glucose	With 4500 mg/L glucose and sodium bicarbonate, without L-glutamine and sodium pyruvate, liquid, sterile-filtered, suitable for cell culture, suitable for hybridoma
D5796	Dulbecco's Modified Eagle's Medium - high glucose	With 4500 mg/L glucose, L-glutamine, and sodium bicarbonate, without sodium pyruvate, liquid, sterile-filtered, suitable for cell culture
D5921	Dulbecco's Modified Eagle's Medium - low glucose	With 1000 mg/L glucose, and sodium bicarbonate, without L-glutamine and phenol red, liquid, sterile-filtered, suitable for cell culture
D6046	Dulbecco's Modified Eagle's Medium - low glucose	With 1000 mg/L glucose, L-glutamine, and sodium bicarbonate, liquid, sterile-filtered, suitable for cell culture
D6429	Dulbecco's Modified Eagle's Medium - high glucose	With 4500 mg/L glucose, L-glutamine, sodium pyruvate, and sodium bicarbonate, liquid, sterile-filtered, suitable for cell culture
D8437	Dulbecco's Modified Eagle's Medium/Nutrient Mixture F-12 Ham	With L-glutamine, 15 mM HEPES, and sodium bicarbonate, liquid, sterile-filtered, suitable for cell culture
M7145	MEM Non-essential Amino Acid Solution (100×)	Without L-glutamine, liquid, sterile-filtered, BioReagent, suitable for cell culture
R0883	RPMI-1640 Medium	With sodium bicarbonate, without L-glutamine, liquid, sterile-filtered, suitable for cell culture
R7388	RPMI-1640 Medium	Modified, with 20 mM HEPES and L-glutamine, without sodium bicarbonate, liquid, sterile-filtered, suitable for cell culture
R7509	RPMI-1640 Medium	Modified, with sodium bicarbonate, without L-glutamine and phenol red, liquid, sterile-filtered, suitable for cell culture
R8758	RPMI-1640 Medium	With L-glutamine and sodium bicarbonate, liquid, sterile-filtered, suitable for cell culture



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Explore our wide selection of Classical Media here!

Merck

Grow Cells Sera

With > 35 years of experience in the management and production of sera for use in cell culture, we offer many varieties of FBS and other sera from diverse animal species. Every serum product we offer is rigorously screened for contaminants, performance-tested in culture and is supported with certification of origin.

We offer sera from diverse species.

View our complete Sera Offering here!

Fetal Bovine Serum

Our FBS product selection categories help you choose the right FBS product for your general or specific cell culture application need, based on attributes relevant to your workflow.

- **FBS Classic:** Our best value fetal bovine sera for general cell culture applications
- **FBS Premier:** For culture processes like biomanufacturing that require stringent testing and release procedures based on internationally-determined standards, these products must pass rigorous testing of up to 56 defined quality release parameters
- **FBS Select:** These FBS products meet standards for tailored supplementation of stem cells, cardiomyocytes, and cells cultured for immunotherapeutic development—just to name a few specialized cell phenotypes

Popular FBS Products for Research

Request a Sera sample

Product No.	Product Name	Description
F2442	FBS - Classic	USA origin, sterile-filtered, suitable for cell culture, suitable for hybridoma
F0926	FBS - Classic	Non-USA origin, from USDA approved countries, Heat Inactivated, sterile-filtered, suitable for cell culture
F4135	FBS - Classic	USA origin, Heat Inactivated, sterile-filtered, suitable for cell culture, suitable for insect cell culture, suitable for hybridoma
12306C	FBS - Premier	Non-USA origin, from USDA approved countries, Heat Inactivated, sterile-filtered, suitable for cell culture
12103C	FBS - Premier	USA origin, suitable for cell culture
12107C	FBS - Premier	USA origin, γ-irradiated by SER-TAIN [™] process, sterile- filtered, suitable for cell culture







Grow Cells Cell Culture Consumables

Millicell[®] Cell Culture Inserts & Plates

Millicell[®] cell culture inserts, plates, and cultureware are designed to maximize user convenience and biological relevance in cell culture applications. Millicell[®] permeable inserts encourage the natural morphology and proliferation of adherent and suspension cell lines. Optimized membranes provide cells with structure and function that closely mimic their in vivo environment, leading to more biologically-relevant results for applications including toxicity screening, primary and secondary screening, cell signaling, cell proliferation, transport assays, and ADME/Tox drug safety studies.

Popular Inserts and Plates

Product No.	Product Name	Description
PSHT004R5	Millicell [®] -96 Cell Culture Insert Plate	Polycarbonate, 0.4 µm pore size, sterile, 96-well cell culture plate, single-well feeder tray, 96-well receiver tray and lid
PSRP004R5	Millicell® -96 Cell Culture Insert Plate, polyethylene terephthalate, 1.0 μm	Polyethylene terephthalate, 1.0 μm pore size, sterile, 96-well cell culture plate, single-well feeder tray, 96-well receiver tray and lid
PSHT004S5	Millicell [®] -96 Cell Culture Insert Plate	Polycarbonate, 0.4 μm pore size, sterile, 96-well cell culture plate, 96-well receiver tray and lid, pack of 5
PSRP004R1	Millicell® -96 Cell Culture Insert Plate, polyethylene terephthalate, 1.0 μm	Polyethylene terephthalate, 1.0 μm pore size, sterile, 96-well cell culture plate, single-well feeder tray, 96-well receiver tray and lid
PSHT010R5	Millicell® -24 Cell Culture Insert Plate, polycarbonate, 0.4 μm	Polycarbonate cell culture insert with pore size of 0.4 μm used in a 24-well pate for cell attachment, cell culture, cell differentiation, drug transport & permeability
PICM0RG50	Millicell® Cell Culture Insert, 30 mm, hydrophilic PTFE, 0.4 μm	Hydrophilic PTFE cell culture insert with pore size of 0.4 μm used in a 6-well plate for Cell Attachment, Cell Culture, Cell Differentiation, Fluorescence & Low Protein Binding
PICM03050	Millicell® Cell Culture Insert, 30 mm, hydrophilic PTFE, 0.4 μm	Hydrophilic PTFE cell culture insert with pore size of 0.4 μm used in a 6-well plate for Cell Attachment, Cell Culture, Cell Differentiation, Fluorescence & Low Protein Binding
PEZGS0816	Millicell [®] EZ SLIDE 8-well glass, sterile	Glass Chamber Slide, Sterile
PEZGS0416	Millicell [®] EZ Slide, 4-well	Glass Chamber Slide, Sterile

Millicell[®] Cell Culture Inserts & Plates



Grow Cells Detect & Prevent Contamination

Select the right antibiotics to prevent contamination in your cell culture projects with our wide variety of effective antibiotics. Antibiotics are available in powder or readymade solutions in varying concentrations for reliable results in your lab.

Confocal Assay for Phagocytosis

Popular Antibiotics to Prevent Contamination

Product No. Product Name Description P4333 Penicillin-Streptomycin Solution stabilized, with 10,000 units penicillin and 10 mg streptomycin/mL, 0.1 µm filtered, BioReagent, suitable for cell culture A5955 Antibiotic Antimycotic Solution (100×), Stabilized 10,000 units penicillin, 10 mg streptomycin and 25 µg amphotericin B per mL, 0.1 µm filtered, BioReagent, suitable for cell culture A2942 Amphotericin B Solution 250 µg/mL in deionized water, 0.1 µm filtered, BioReagent, suitable for cell culture A9528 Amphotericin B Solubilized Powder, y-irradiated, BioXtra, suitable for cell culture 50 mg/mL in deionized water, liquid, 0.1 μm filtered, BioReagent, suitable for cell G1397 Gentamicin Solution culture N4014 Nystatin Powder, y-irradiated, BioXtra, suitable for cell culture N9150 Nystatin Ready Made Solution Suitable for cell culture N1638 Nystatin Suspension Suspension, 10,000 unit/mL in DPBS, BioReagent, suitable for cell culture G6784 L-Glutamine-Penicillin-Streptomycin Solution L-glutamine 200 mM, penicillin 10,000 units, streptomycin 10 mg/mL, 0.1 µm filtered, BioReagent, suitable for cell culture **MPOO30** LookOut[®] Mycoplasma Elimination Kit Kit sufficient for 5 mL mycoplasma elimination, PCR suitable **MPOO40A** LookOut[®] Mycoplasma qPCR Detection Kit Sufficient for 25 reactions, PCR suitable MP0025 Venor[™] GeM Mycoplasma Detection Kit, PCR-based Kit sufficient for 25 tests, PCR suitable

View our complete Antibiotics offering here!







Modify/Treat Cell Dissociation

Cell Dissociation Reagents

Enzymes like trypsin and collagenase are essential for the detachment of adherent cells and solid tissues for subculture and experiments. Recombinant trypsin, solutions containing EDTA, and non-enzymatic solutions provide stabler, gentler options for wider culture applications.

Our comprehensive collection of cell dissociation reagents includes:

- Trypsin in liquid or powdered formats, with and without EDTA, phenol red
- StableCell[™] Trypsin remains active at room temperature—no freezer or cold storage needed
- Accumax[™] and Accutase[®] solutions ensure effective, gentle dissociation for iPS and sensitive cell types
- Wide selection of ECM-digestion enzymes includes collagenase and elastase

View our entire portfolio of Cell Dissociation Reagents here!

Popular Cell Dissociation Reagents

Product No.	Product Name	Description
Т3924	Trypsin-EDTA Solution	1×, sterile; sterile-filtered, BioReagent, suitable for cell culture, 0.5 g porcine trypsin and 0.2 g EDTA • 4Na per liter of Hanks' Balanced Salt Solution with phenol red
T4049	Trypsin-EDTA Solution	0.25%, sterile-filtered, BioReagent, suitable for cell culture, 2.5 g porcine trypsin and 0.2 g EDTA • 4Na per liter of Hanks' Balanced Salt Solution with phenol red
T2601	StableCell™ Trypsin Solution	1X, sterile-filtered, BioReagent, suitable for cell culture, 0.5 g porcine trypsin and 0.2 g EDTA • 4Na per liter of Hanks' Balanced Salt Solution with phenol red
A7089	Accumax [™] Solution	Sterile-filtered, suitable for cell culture
A6964	Accutase [®] Solution	Sterile-filtered, suitable for cell culture





Modify/Treat Cytokines & Growth Factors

Our extensive portfolio includes growth factors from multiple sources, expressed in both bacterial and mammalian hosts with select animal component free options. Explore our selection of high-quality recombinant growth factors and cytokines to achieve consistent cell signaling outcomes that is essential for optimum growth and differentiation of cells.

Our most popular growth factors

Product No.	Product Name	Description
E9644	hEGF	EGF, recombinant, expressed in E. coli, lyophilized powder, suitable for cell culture
F0291	hBFGF	FGF-Basic, recombinant, expressed in E. coli, suitable for cell culture
GF003AF	Fibroblast Growth Factor Basic, Human Recombinant, Animal-free	The Fibroblast Growth Factor-basic (or bFGF protein) is a heparin binding growth factor which stimulates the proliferation of a wide variety of cells including mesenchymal, neuroectodermal & endothelial cells
E2759	Endothelial Cell Growth Supplement From Bovine Neural Tissue	ECGS, suitable for cell culture
B3795	Brain-derived Neurotrophic Factor Human	BDNF, recombinant, expressed in E. coli, lyophilized powder, suitable for cell culture
SRP3014	BDNF Human	Carrier free, recombinant, expressed in E. coli, \geq 95% (SDS-PAGE), suitable for cell culture
14269	Interleukin-4 Human	IL-4, recombinant, expressed in E. coli, lyophilized powder, suitable for cell culture
V7259	Vascular Endothelial Growth Factor Human	VEGF, recombinant, expressed in E. coli, powder, suitable for cell culture



View our entire Growth Factors portfolio here!



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Modify/Treat Albumins & Transport Proteins

Albumin is used in vitro to bind, sequester and stabilize a range of important small molecules and proteins. We provide bovine and human serum albumins and transport protein reagents for diverse applications, including cell culture, protein quantitation, and antibody-related studies.

Our portfolio includes additional albumin products for specific applications requiring human and other nonbovine proteins. Recombinant human albumins and animal component-free (ACF) albumin are supplied in aqueous buffers or lyophilized powder formats. We provide cGMP, cell culture, diagnostic and molecular grades of BSA.

Our most popular Albumins

Product No.	Product Name	Description
A7030	Bovine Serum Albumin	Heat shock fraction, protease free, fatty acid free, essentially globulin free, pH 7, \geq 98%
A7906	Bovine Serum Albumin	Heat shock fraction, pH 7, \geq 98%
A9576	Bovine Serum Albumin Solution	30% in DPBS, sterile-filtered, BioXtra, suitable for cell culture
A2153	Bovine Serum Albumin	Lyophilized powder, \geq 96% (agarose gel electrophoresis)
A8806	Bovine Serum Albumin	Fatty acid free, low endotoxin, lyophilized powder, BioReagent, suitable for cell culture, \geq 96% (agarose gel electrophoresis)
A2058	Bovine Serum Albumin Solution	30% in DPBS, sterile-filtered, BioXtra, suitable for cell culture
A9731	Albumin Human	Recombinant, expressed in rice, lyophilized powder, suitable for cell culture, low endotoxin, \geq 96% (SDS-PAGE)



View our entire Transport Protien portfolio here!



Modify/Treat Supplements & Reagents

Ensuring adequate cell growth relies on many culture conditions, including the correct media formulation for your cell line. To support cell growth, basal or complex media can be refined and enriched with supplements such as amino acids, vitamins, lipids, hormones, and sugars. Our cell culture supplements and reagents are backed by our superior customer service and commitment to quality.

Our most popular Reagents

Product No.	Product Name	Description
A8185	Alanyl-Glutamine	BioReagent, suitable for cell culture, suitable for insect cell culture
G7513	L-Glutamine Solution	200 mM, solution, sterile-filtered, BioXtra, suitable for cell culture
19278	Insulin Solution Human	Sterile-filtered, BioXtra, suitable for cell culture
10516	Insulin Solution from Bovine Pancreas	BioReagent, 10 mg/mL insulin in 25 $$ mM HEPES, pH 8.2, sterile-filtered, suitable for cell culture
M6020	D-(+)-Mannose	Powder, BioReagent, suitable for cell culture
G7021	D-(+)-Glucose	Powder, BioReagent, suitable for cell culture, suitable for insect cell culture, suitable for plant cell culture, \geq 99.5%
G8769	D-(+)-Glucose Solution	45% in H2O, sterile-filtered, BioXtra, suitable for cell culture
D4902	Dexamethasone	Powder, BioReagent, suitable for cell culture, \geq 97%
D2915	Dexamethasone-Water Soluble	Suitable for cell culture, BioReagent



View our entire Supplement portfolio here!





Plate/Assay Protein Assays

ELISA

Covering a diversity of research areas and species, our pre-validated, easy to use ELISAs deliver reliable and reproducible results for quantifying biomarkers in complex sample types at the pg/mL level. With over > 1,800 sensitive and specific ELISAs—the easiest way to search them is at:

SigmaAldrich.com/ELISA

Multiplex Biomarker Detection

Researchers rely on commercial immunoassays to study biomarker expression in a wide variety of research applications. Your time and samples are too precious to trust anything but the most highly verified MILLIPLEX[®] multiplex assays for the Luminex[®] platform

Discover with confidence using MILLIPLEX[®] multiplex assays:



Duolink[®] Proximity Ligation Assay (PLA)

Duolink[®] PLA protein detection technology is based on in situ proximity ligation assay (PLA), and allows for the detection, visualization, and quantification of protein expression, protein-protein interactions, and post-translational modifications, in unmodified cells and tissue samples within a matter of hours. Learn more at:



SigmaAldrich.com/duolinkpla





Immunodetection with

Duolink[®] PLA

Western Blotting

We never stop working to find innovative solutions that improve immunoblot reliability, speed, sensitivity, and quantitative potential to get you to publishable results in time, every time. Our catalog includes thousands of products for Western blotting, including:

- Pre-cast & hand-casting protein gel reagents
- Immobilon[®] transfer membranes
- Cytiva[™] Amersham Protran[®] nitrocellulose membranes
- Cytiva[™] ECL[®] detection substrates
- Roche[®] cOmplete[™] Protease inhibitor cocktails

Access to our Western blotting expertise is easy at:

SigmaAldrich.com/westernblot





Plate/Assay Cellular Assays



Live Cell Imaging Reagents

Designed to be non-toxic and to protect live cells while optimizing visualization during real-time studies of cell trafficking and localization, cell health, gene expression, migration, cytoskeletal dynamics, and other cellular events.

Cell Migration & Invasion Assays

Portfolio of migration assays, invasion assays, scratch assays, and chemotactic and haptotactic Boyden chamber assays enable researchers to simulate the conditions and activities of normal and metastatic cells in vivo.

Cell Health Analysis

Protect valuable cell cultures and assess the effects of experimental treatments using assays for cell viability, proliferation, toxicity, and detection/elimination of mycoplasma and other culture contaminants.

Cell Isolation Kits

Perform safe, efficient isolation with high yields of stem cells and other critical cell phenotypes, preadipocytes, nuclei, and subcellular complexes such as proteasomes.



Roche® Cellular Assays

Cellular analysis kits from Roche for inducing cell proliferation, measuring cell viability, and cytotoxicity ensure that every step of the process is as efficient and robust as possible.

Product No.	Product Name	Description
11465007001	Cell Proliferation Kit I (MTT)	Colorimetric assay for the nonradioactive quantification of cellular proliferation, viability, and cytotoxicity. Sample material is either adherent or suspension cells cultured in 96-well microplates
11465005001	Cell Proliferation Kit II (XTT)	Colorimetric assay for the nonradioactive quantification of cellular proliferation, viability, and cytotoxicity. Sample material is either adherent or suspension cells cultured in 96-well microplates
CELLPRO-RO	Cell Proliferation Reagent WST-1	Cell Proliferation Reagent WST-1
11644793001	Cytotoxicity Detection Kit (LDH)	Suitable for protein quantification, suitable for cell analysis, detection, sufficient for $\leq 2,000$ tests
6432379001	Cell Viability Imaging Kit 5x96	Suitable for protein quantification, suitable for cell analysis, detection, solution
CYTODET-RO	Cytotoxicity Detection Kit PLUS (LDH)	Nonradioactive colorimetric assay suitable for high- throughput quantification of cell death and cell lysis, based on the measurement of lactate dehydrogenase (LDH). Available for 400 or 2,000 multiwell tests







Plate/Assay Antibodies

Comprehensive Antibody Portfolio

As a leading antibody developer, our highly cited antibodies provide researchers superior quality and validation in diverse immunodetection applications.

Applications include:

- Immunocytochemistry (ICC)
- Immunohistochemistry (IHC)
- Immunofluorescence (IF)
- Western blot (WB)

• ELISA

• Flow Cytometry (FC)

• Immunoprecipitation (IP)

To provide you with convenient and economical access to our highly characterized antibodies, we now offer small pack size antibodies in 25 μ g or 25 μ L. These small pack sizes enable you to test and trial more antibodies, at least 5 samples of Western blots, for example, before purchasing larger amounts.

Purchase Guarantee: Prepack items are backed by our Antibody Guarantee to allow customers to evaluate our antibody products with complete confidence in antibody performance.

Antibody Explorer for Recombinant, Polyclonal & Monoclonal Antibodies



Explore Recombinant, Polyclonal & Monoclonal Antibodies

Enter Antigen / Antibody

* Search Within

- All Antibodies
- O Primary Antibodies Only
- Secondary Antibodies Only
- Recombinant Monoclonal Antibodies Only
- O Cell Marque IVD Use Antibodies Only

REFINE SEARCH (OPTIONAL)

Clonality		Application	
Please select	~	Please select	~
Species Reactivity		Host Species	
Please select	~	Please select	~
Conjugate			
O All			
All Conjugated			
O Conjugated			

Explore Recombinant, Polyclonal & Monoclonal Antibodies at:



SigmaAldrich.com/antibodies



Analyze Cells Cell Counting

Scepter[™] 3.0 Handheld Cell Counter

The Scepter[™] 3.0 cell counter provides the unparalleled precision of Coulter impedance counting in a convenient, handheld format. Our newest version of the popular Scepter[™] cell counter has been updated with features that make it more convenient, easy-to-use, and accurate than ever before.

- Uses the Coulter impedance method which avoids common artifacts arising from image-based cell counting methods
- Does not rely on user technique or manual calculation for accuracy
- Counts thousands of cells per measurement for maximum precision
- Has a uniquely ergonomic design, convenient for measurements and storage at the tissue culture hood
- Returns precision counts in less than 30 seconds

Product No.	Product Name	Description
PHCC340KIT	Scepter [™] 3.0 Handheld Automated Cell Counter	Rapid cell counts in a handheld easy to use format, includes pkg of 40 µm Scepter™ 3.0 Cell Counter Sensors
PHCC360KIT	Scepter [™] 3.0 Handheld Automated Cell Counter	Rapid cell counts in a handheld easy to use format, includes pkg of 60 µm Scepter™ 3.0 Cell Counter Sensors



Learn more at SigmaAldrich.com/Scepter



Scepter[™] 3.0 Handheld Cell Counter



Analyze Cells Cell Imaging



Millicell[®] DCI Digital Cell Imager

Millicell[®] DCI Digital Cell Imager

Measure and assess your cell cultures with ease. The Millicell[®] DCI Digital Cell Imager provides quick, objective determination of common cell culture parameters including confluency, cell count, and morphology. Save time and conserve precious culture sample with in-vessel measurement. Track and record cell culture data using streamlined data management web tools. Analyze cell growth trends with instant access to historical data for more consistent cell cultures.

See it in action at:

millicelldci.com

Live Cell Imaging with the CellASIC[®] ONIX2 System

The ability to grow, observe and change conditions for living cells requires precision control over the cell culture environment. The second generation CellASIC[®] ONIX2 Microfluidic System is a powerful, automated platform for precise manipulation of multiple key cell culture parameters, enabling measurement of cellular responses to preprogrammed media, temperature, and gas environment changes.

The CellASIC[®] ONIX2 Microfludic System uses high quality, optically clear microfluidic plates and intuitive software, while integrating with a broad range of inverted microscopes to allow continuous, high magnification observation of live cells—as they react to their environment over time.

Learn more at:

SigmaAldrich.com/cellasic



CellASIC® ONIX2 System



Thaw/Freeze Cell Freezing Media

Cell Freezing Solutions

Protect your cells and prevent the formation of intracellular ice crystals and minimize cell stress by using our application-tested cryoprotectants, freezing containers and ready-to-use media. We offer an extensive line of sterile-filtered, application-tested cryoprotectants like DMSO as well as ready-to-use cell freezing media with and without DMSO that are designed to maximize cell viability during the freezing and thawing processes.

Popular Products for Cell Cryopreservation

Product No.	Product Name	Description
D2650	Dimethyl Sulfoxide	Hybri-Max [™] , sterile-filtered, BioReagent, suitable for hybridoma, ≥99.7%
D2438	Dimethyl Sulfoxide	Sterile-filtered, BioPerformance Certified, meets EP, USP testing specifications, suitable for hybridoma
C2874	CryoStor [®] Cell Cryopreservation Media	CS10, sterile filtered, mammalian suitable, cryopreservation suitable
C2999	CryoStor® Cell Cryopreservation Media	CS5, sterile filtered, mammalian suitable, cryopreservation suitable
C6164	Cell Freezing Medium-DMSO 1×	Sterile-filtered, suitable for cell culture

View all our Cell Freezing solutions here!

Looking for cryogenic freezer tubes, vials, racks, labels, markers, storage boxes, and gloves?

View our Cryo Storage products here!









Technical Service: SigmaAldrich.com/techinfo



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