

Cell culture workflow

growth, analysis, processing

Cell culture workflow



Process

Buffers and salts
Detergents

Cell culture is an essential step in cell biology. Life science researchers rely on controlled conditions to grow the cells. Various chemicals and reagents are needed to mimic/manipulate natural environment and to extract biomolecules from cells for further analysis in genomics/proteomics etc.

Our products can support every step of the cell culture workflow; from growth to analysis and on to processing. Our portfolio includes a variety of chemicals and reagents to support three major part of the cell biology workflow:

Growth: cell growth media components like agar, carbohydrates and antibiotics.

Analysis: cell culture chemicals, biological stains and apoptosis reagents that can be used to analyze the cells like microscopy/histology and cellular assays.

Processing: buffers, salts and detergents for processing the grown cells to extract biomolecules like DNA, RNA, lipids and metabolites to be used in downstream applications like genomics/proteomics/lipidomics and metabolomics.

Carbohydrates

Product No.	Description	Pack Size	Workflo	w Step
A17730	Cellulose, microcrystalline	10000 g, 2500 g, 500 g	Grow	Upstream
13236	D(-)-Ribose, 99+%	5 g, 25 g, 100 g, 500 g	Grow	Upstream
10846	D(+)-Cellobiose, 98%	5 g, 25 g, 100g , 500 g	Grow	Upstream
15061	D(+)-Galactose, 99+%	1 kg, 5 kg, 25 kg, 100 kg, 500 kg	Grow	Upstream
A16828	D-(+)-Glucose, anhydrous, 99%	10000 g, 2500 g, 500 g	Grow	Upstream
15060	D(+)-Mannose, 99+%	1 kg, 2.5 kg, 25 kg, 100 kg	Grow	Upstream
J21060	D-(+)-Raffinose pentahydrate, Thermo Scientific	100 g, 500 g, 1 kg	Grow	Upstream
18255	D(+)-Trehalose dihydrate, 99%	2.5 kg, 25 kg, 100 kg, 500 kg	Grow	Upstream
J14489	Dextran sulfate sodium salt, Thermo Scientific	10 g, 50 g, 100 g	Grow	Upstream
A14030	D-Mannitol, 97+%	1000 g, 5000 g, 250 g	Grow	Upstream
13273	D-Sorbitol, 97%	1 kg, 2.5 kg, 5 kg, 10 kg, 100 kg, 500 kg	Grow	Upstream
J16445	Glycogen, from oysters, Ultrapure, Thermo Scientific	5 g, 25 g, 100 g	Grow	Upstream
23537	Inositol hexaphosphoric acid, 50 wt% aqueous solution	1 L, 2.5 L, 250 mL	Grow	Upstream
10498	L(+)-Arabinose, 99+%	25 g, 100 g, 500 g	Grow	Upstream
17408	L(+)-Rhamnose monohydrate, 99%	25 g, 100 g, 500 g	Grow	Upstream
J66491	Maltotriose, 98%	1 g, 5 g	Grow	Upstream

Buffers and salts

Product No.	Description	Pack Size	Workflow Step	
16887	2,2-Bis(hydroxymethyl)-2,2',2"-nitrilotriethanol, 99+%	2.5 kg, 100 g, 500 g	Process	Downstream
21497	Cacodylic acid, sodium salt trihydrate, 98%, pure	10 g, 25 g, 100 g, 500 g	Process	Downstream
J16405	Glycine, 98.5-101.5% (dry basis), Thermo Scientific	1 kg, 5 kg, 25 kg	Process	Downstream
J60712	HEPES, 1.0M buffer soln., pH 7.5	250 mL, 500mL	Process	Downstream
17257	HEPES, 99%, for biochemistry	1 kg, 5 kg, 25 kg, 100 kg, 250 kg	Process	Downstream
J62623	HEPES-buffered saline, pH 7.0 (2X for transfection)	250 mL, 500 mL	Process	Downstream
J17525	Imidazole, 98.5+% (dry basis), Ultrapure, Thermo Scientific	100 g, 500 g, 1 kg, 5 kg, 10 kg	Process	Downstream
J67795	Krebs-Ringer Solution, HEPES-buffered	500 mL, 1 L	Process	Downstream
17259	MES hydrate, 99+%, for biochemistry	2.5 kg, 25 g, 100 g, 500 g	Process	Downstream
A12914	MOPS, 99%	25 g, 100 g, 500 g	Process	Downstream
J67653	Phosphate-buffered saline (DPBS, 10X), Dulbecco's formula, without calcium, without magnesium	500 mL, 1 L	Process	Downstream
J67802	Phosphate-buffered saline (DPBS, 1X), Dulbecco's formula, without calcium, without magnesium	500 mL, 1 L	Process	Downstream
J62036	Phosphate-buffered saline (PBS, 10X), pH 7.4	1 L, 2 L, 4 L	Process	Downstream
J62851	Phosphate-buffered saline (PBS, 10X), RNase free	250 mL, 500 mL	Process	Downstream
J61196	Phosphate-buffered saline (PBS, 1X), sterile-filtered	500 mL	Process	Downstream
J62990	RBC lysis buffer for human	250 mL, 500 mL	Process	Downstream
J22561	Tricine, 98.5+% (dry basis), Ultrapure, Thermo Scientific	100 g, 500 g, 1 kg	Process	Downstream
32734	Tris EDTA buffer, for molecular biology, DNAse, RNAse, Protease free ready to use, pH 8.0	500 mL	Process	Downstream
22803	Tris(hydroxymethyl)aminomethane hydrochloride, 99+%, extra pure	1 kg, 5 kg, 100 g, 250 g	Process	Downstream
14050	Tris(hydroxymethyl)aminomethane, 99+%, for biochemistry	1 kg, 2.5 kg, 10 kg, 500g	Process	Downstream
J62938	TRIS-buffered saline (TBS, 10X) pH 7.4, for Western blot	1 L, 2 L, 4 L	Process	Downstream

Cell culture media

Product No.	Description	Pack Size	Workflo	w Step
44357	Agar, bacteriological grade	250 g, 1 kg, 5 kg	Grow	Upstream
H26724	Agar, plant cell culture tested	2500 g, 100 g, 500 g	Grow	Upstream
J10654	Agar, Thermo Scientific	1 lb, 5 lb, 25 lb	Grow	Upstream
J64655	Albumin, Bovine, Fraction V, 97%, Standard Grade, pH 7.0	10 g, 50 g, 100 g, 250 g, 1 kg	Grow	Upstream
J63423	Gellan Gum	250 g, 1 kg	Grow	Upstream
J61525	LB Agar plate, plain	20 plates	Grow	Upstream
J75851	LB Agar, Ready-Made Powder, Thermo Scientific	1 kg	Grow	Upstream
J75852	LB Broth, Ready-Made Powder, Thermo Scientific	250 g, 1 kg	Grow	Upstream
J75854	Luria Broth (LB), Ready-Made Powder, Thermo Scientific	1 kg	Grow	Upstream
J75856	Terrific Broth, Ready-Made Powder, Ultrapure, Thermo Scientific	1 kg	Grow	Upstream
H26769	Yeast Extract	100 g, 500 g	Grow	Upstream
H26271	Yeast Nitrogen Base, without amino acids, without ammonium sulfate	100 g, 500 g	Grow	Upstream

Cell culture chemicals

Product No.	Description	Pack Size	Workflow Step	
J66650	Dimethyl sulfoxide, Bioreagent	50 mL, 100 mL, 250 mL, 500 mL, 1 L	Analyze	Downstream
J21486	DL-Serine, non-animal, 98.5+%, Thermo Scientific	100 g, 1 kg	Grow	Upstream
J60401	Formaldehyde, 4% in PBS	250 mL, 500 mL	Analyze	Downstream
44709	N,N-Dimethylformamide, 99.9%, for biochemistry, AcroSeal™	1 L, 2.5 L	Analyze	Downstream
J61899	Paraformaldehyde, 4% in PBS	250 mL, 500 mL	Analyze	Downstream
043728	Polyvinylpyrrolidone, M.W. 1,300,000	50 g, 250 g, 1 kg	Analyze	Downstream
J62417	Polyvinylpyrrolidone, M.W. 40,000	100 g, 500 g, 1 kg	Analyze	Downstream
44781	Sodium azide, 99+%, for biochemistry	25 g, 100 g, 500 g	Process	Downstream

Apoptosis

Product No.	Description	Pack Size	Workflow	Workflow Step	
J63522	Antimycin A	5 mg, 10 mg	Analyze	Downstream	
J62340	Brefeldin A, 99%	10 mg, 25 mg, 50 mg	Analyze	Downstream	
J62523	Camptothecin	1 g, 5 g, 250 mg	Analyze	Downstream	
J60433	Carboplatin	1 g, 5 g	Analyze	Downstream	
22712	Colchicine, 97%	1 g, 5 g, 25 g, 500 mg	Analyze	Downstream	
J60174	Docetaxel, 99%	1 g, 100 mg, 500 mg	Analyze	Downstream	
J64000	Doxorubicin hydrochloride	10 mg, 50 mg	Analyze	Downstream	
11774	Ellagic acid, 97%	2.5 g, 10 g, 50 g	Analyze	Downstream	
H26425	Hypericin, 98%	5 g, 25 g, 25 mg, 100 mg	Analyze	Downstream	
J60373	Kaempferol, 98+%	10 mg, 50 mg	Analyze	Downstream	
J62452	Melatonin, 99+%	5 g, 25 g	Analyze	Downstream	
J63193	Mitomycin C	5 mg, 1 mg, 10 mg	Analyze	Downstream	
J64206	N,N,N',N'-Tetrakis-(2-pyridylmethyl)ethylenediamine	300 mg, 100 mg	Analyze	Downstream	
45613	Oxaliplatin, 99%	100 mg	Analyze	Downstream	
J62734	Paclitaxel, 99.5+%	1 g, 100 mg, 500 mg	Analyze	Downstream	
J61707	Suramin hexasodium salt, 98+%	1 g, 250 mg, 500 mg	Analyze	Downstream	
J63509	Tamoxifen, 98%	1 g, 5 g, 500 mg	Analyze	Downstream	

Antibiotics

Product No.	Description	Pack Size	Workflow Step	
B20841	(R,R)-Chloramphenicol, 99+%	25 g, 100 g	Grow	Upstream
25771	4-Epioxytetracycline, 'can be used as secondary standard'	100 mg	Grow	Upstream
23312	4-Epitetracycline hydrochloride, 'can be used as a secondary standard'	100 mg, 500 mg	Grow	Upstream
23313	Anhydrotetracycline hydrochloride, 'can be used as a secondary standard'	100 mg, 500 mg	Grow	Upstream
J61949	Carbenicillin disodium salt	1 g, 5 g, 25 g	Grow	Upstream
22792	Chloramphenicol, 98%	25 g, 100 g, 500 g	Grow	Upstream
35742	Cycloheximide, 95%	1 g, 5 g, 25 g	Grow	Upstream
22848	D-Cycloserine, 98%	1 g, 5 g, 25 g	Grow	Upstream
11868	Ethylmercurithiosalicylic acid, sodium salt, 97.0-101.0%	5 g, 25 g, 100 g, 500 g	Grow	Upstream
J60681	Hygromycin B	1g, 100 mg, 250 mg	Grow	Upstream
J17924	Kanamycin sulfate, Ultrapure, Thermo Scientific	5 g, 25 g	Grow	Upstream
22694	Mitomycin C, contains 2 mg Mitomycin C and 48 mg NaCl	2 mg	Grow	Upstream
J62427	Oxytetracycline, 96%	10 g, 50 g, 100 g	Grow	Upstream
J67236	Puromycin, 10 mg/ml in distilled water, sterile-filtered	*5 x 1 mL, 1 mL	Grow	Upstream
J62473	Rapamycin, 99+%	200 mg, 100 mg, 50 mg	Grow	Upstream
J61820	Spectinomycin dihydrochloride pentahydrate, Cell Culture Grade	5 g, 25 g	Grow	Upstream
3285	Sulfanilamide, 98%	2.5 kg, 100 g, 500 g	Grow	Upstream
162790	Vancomycin hydrochloride, Molecular Biology Grade	1 g, 5 g	Grow	Upstream
J67140	Zeocin™ 100 mg/ml in HEPES, sterile-filtered	*5 x 1 mL, 1 mL	Grow	Upstream

Biological stains

Product	Description	Pack Size	Workflow	Step
No. 22790	Acid Fuchsin, pure, high purity biological stain	25 g, 100 g, 500 g	Analyze	Downstream
22966	Aniline Blue, sodium salt, pure, water soluble, high purity biological stain	25 g, 100 g	Analyze	Downstream
A12952	Basic fuchsin	5 g, 25 g, 100 g	Analyze	Downstream
22959	Brilliant cresyl Blue, pure, high purity biological stain	10 g, 25 g	Analyze	Downstream
22960	Brilliant Green, pure, high purity biological stain	100 g, 500 g	Analyze	Downstream
19020	Carmine, pure, high purity biol.stain, alum lake of carminic acid	5 g, 25 g, 100 g	Analyze	Downstream
15323	Giemsa Stain, pure, high purity biological stain	5 g, 25 g	Analyze	Downstream
19168	Janus Green B, pure, high purity biological stain	5 g, 25 g	Analyze	Downstream
B23330	Light green SF Yellowish	10 g, 50 g	Analyze	Downstream
61185	Light Green SF, Yellowish, pure, Certified biological stain	25 g	Analyze	Downstream
18948	Nigrosine, pure, water soluble, high purity biological stain	25 g, 100 g	Analyze	Downstream
22982	Orange G, 85+%, pure, high purity biological stain	25 g, 100 g	Analyze	Downstream
22788	Pararosaniline chloride, pure, high purity biological stain	5 g, 25 g, 100 g, 500 g	Analyze	Downstream
18947	Phloxine B, 85%, pure, high purity, Biological stain	5 g, 25 g	Analyze	Downstream
20010	Pyronin Y, pure, high purity biological stain	1 g, 5 g, 25 g	Analyze	Downstream
18990	Resazurin, sodium salt, pure, high purity biological stain	1 g, 5 g, 25 g	Analyze	Downstream

Detergents

Product No.	Description	Pack Size	Workflow	/ Step
J64928	N-Lauroylsarcosine sodium salt, ultrapure, 97%	50 g	Process	Downstream
23336	Polysorbate 20	5 mL, 250 mL, 1 L, 5 L, 25 L	Process	Downstream
27863	Polysorbate 80	250 mL, 1 L, 2.5 L, 10 L	Process	Downstream
J62288	Sodium deoxycholate, 97%	25 g, 100 g, 250 g	Process	Downstream
A11183	Sodium n-dodecyl sulfate, 99% (dry wt.), water <1.5%	25 g, 50 g, 100 g, 250 g, 500 g	Process	Downstream
46426	Tergitol™ 15-S-40, 70% solution in water	250 mL, 1 L, 2.5 LT	Process	Downstream
46425	Tergitol™ 15-S-9	250 mL, 1 L, 2.5 L, 10 L	Process	Downstream
A16046	Triton® X-100	100 mL, 500 mL, 2500 mL		
42236	Triton® X-114	500 mL, 2.5 L	Process	Downstream



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