

The background of the advertisement is a vibrant, stylized illustration. It features a network of red and purple molecular structures at the top. Below them, a petri dish with red agar and white bacterial colonies is shown. In the center, a woman with dark hair, wearing a white lab coat and red safety goggles, is depicted in profile, looking towards the right. To her left is a large white silhouette of a laboratory bottle. At the bottom left, there are chemical structures, including a carboxylic acid and an alcohol, with labels R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, and R<sup>4</sup>. A small pipette is visible on the far left. At the bottom right, two test tubes containing red liquid are shown. The overall color palette is dominated by red, purple, and white.

thermo scientific

This  
is more  
than a  
**chemical**

Life science

# Cell culture workflow

Growth, analysis, processing

Find it at [fishersci.com](https://fishersci.com) and [fishersci.ca](https://fishersci.ca)

 **fisher** scientific  
part of Thermo Fisher Scientific

# Cell culture workflow



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 parts 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

Fisher Scientific Cat. No.	Product Description	Size	Workflow Step
AAA1773036	Cellulose, microcrystalline	500g, 2500g, 10000g	Grow, Upstream
AC132360050	D(-)-Ribose, 99+%	5g, 25g, 100g, 500g	Grow, Upstream
AC108460050	D(+)-Cellobiose, 98%	5g, 25g, 100g, 500g	Grow, Upstream
AC150611000	D(+)-Galactose, 99+%	100g, 500g, 1kg, 5kg, 25kg	Grow, Upstream
AAA1682836	D-(+)-Glucose, anhydrous, 99%	500g, 2500g, 10000g	Grow, Upstream
AC150600250	D(+)-Mannose, 99+%	25g, 100, 1kg, 2.5kg	Grow, Upstream
AAJ2106022	D-(+)-Raffinose pentahydrate, Thermo Scientific	100g, 500g, 1kg	Grow, Upstream
AC182550250	D(+)-Trehalose dihydrate, 99%	25g, 100g, 500g, 2.5kg	Grow, Upstream
AAJ1448909	Dextran sulfate sodium salt, Thermo Scientific	10g, 50g, 100g	Grow, Upstream
AAA1403030	D-Mannitol, 97+%	250g, 1000g, 5000g	Grow, Upstream
AC132730050	D-Sorbitol, 97%	5g, 100g, 500g, 1kg, 2.5kg, 10kg	Grow, Upstream
AC235372500	Inositol hexaphosphoric acid, 50 wt% aqueous solution	250mL, 1L, 2.5L	Grow, Upstream
AC104980250	L(+)-Arabinose, 99+%	25g, 100g, 500g	Grow, Upstream
AC174080250	L(+)-Rhamnose monohydrate, 99%	25g, 100g, 500g	Grow, Upstream
AAJ6649103	Maltotriose, 98%	1g, 5g	Grow, Upstream
AA3640436	D-Sorbitol, 98%	500g	Grow, Upstream
AA36718A4	Methyl cellulose, viscosity 4000 cPs	2.5kg	Grow, Upstream

## Buffers and salts

Fisher Scientific Cat. No.	Product Description	Size	Workflow Step
AC168871000	2,2-Bis(hydroxymethyl)-2,2',2''-nitrilotriethanol, 99+%	100g, 500g, 2.5kg	Process, Downstream
AC214970100	Cacodylic acid, sodium salt trihydrate, 98%, pure	10g, 25g, 100g, 500g	Process, Downstream
AAJ60712AK	HEPES, 1.0M buffer soln., pH 7.5	250mL, 500mL	Process, Downstream
AAJ62623AK	HEPES-buffered saline, pH 7.0 (2X for transfection)	250mL, 500mL	Process, Downstream
AAJ1752522	Imidazole, 98.5+% (dry basis), Ultrapure, Thermo Scientific	100g, 500g, 1kg, 5kg, 10kg	Process, Downstream
AAJ67795AP	Krebs-Ringer Solution, HEPES-buffered	500mL, 1L	Process, Downstream
AC172590250	MES hydrate, 99+%, for biochemistry	25g, 100g, 500g, 2.5kg	Process, Downstream
AAA1291414	MOPS, 99%	25g, 100g, 500g	Process, Downstream
AAJ67653AP	Phosphate-buffered saline (DPBS, 10X), Dulbecco's formula, without calcium, without magnesium	500mL, 1L	Process, Downstream
AAJ67802AP	Phosphate-buffered saline (DPBS, 1X), Dulbecco's formula, without calcium, without magnesium	500mL, 1L	Process, Downstream
AAJ62036K2	Phosphate-buffered saline (PBS, 10X), pH 7.4	1L, 2L, 4L	Process, Downstream
AAJ62851AK	Phosphate-buffered saline (PBS, 10X), RNase free	250mL, 500mL	Process, Downstream
AAJ61196AP	Phosphate-buffered saline (PBS, 1X), sterile-filtered	500mL	Process, Downstream
AAJ62990AK	RBC lysis buffer for human	250mL, 500mL	Process, Downstream
AC327345000	Tris EDTA buffer, for molecular biology, DNase, RNase, Protease free ready to use, pH 8.0	500mL	Process, Downstream
AC228031000	Tris(hydroxymethyl)aminomethane hydrochloride, 99+%, extra pure	100g, 250g, 1kg, 2.5kg, 5kg	Process, Downstream
AC140505000	Tris(hydroxymethyl)aminomethane, 99+%, for biochemistry	500g, 1kg, 10kg	Process, Downstream
AAJ62938K2	TRIS-buffered saline (TBS, 10X) pH 7.4, for Western blot	1L, 2L, 4L	Process, Downstream

## Cell culture media

Fisher Scientific Cat. No.	Product Description	Size	Workflow Step
AAH2672422	Agar, plant cell culture tested	100g, 500g, 2500g	Grow, Upstream
AAJ6465518	Albumin, Bovine, Fraction V, 97%, Standard Grade, pH 7.0	10g, 50g, 100g, 250g, 1kg	Grow, Upstream
AAJ6342330	Gellan Gum	250g, 1kg	Grow, Upstream
AAJ61525EQF	LB Agar plate, plain	20 plates	Grow, Upstream
AAJ7585230	LB Broth, Ready-Made Powder, Thermo Scientific	250g, 1kg	Grow, Upstream
AAJ75856A1	Terrific Broth, Ready-Made Powder, Ultrapure, Thermo Scientific	1kg	Grow, Upstream
AAH2676922	Yeast Extract	100g, 500g	Grow, Upstream
AAH2627122	Yeast Nitrogen Base, without amino acids, without ammonium sulfate	100g, 500g	Grow, Upstream
AC468552500	Yeast extract, for biochemistry	250g, 1kg	Grow, Upstream
AC611801000	Yeast extract, Molecular genetics, powder	100g, 500g	Grow, Upstream

## Cell culture chemicals

Fisher Scientific Cat. No.	Product Description	Size	Workflow Step
AAJ66650AD	Dimethyl sulfoxide, Bioreagent	50ml, 100ml, 250ml, 500ml, 1L	Analyze, Downstream
AAJ2148622	DL-Serine, non-animal, 98.5+%, Thermo Scientific	100g, 1kg	Grow, Upstream
AAJ60401AK	Formaldehyde, 4% in PBS	250ml, 500ml	Analyze, Downstream
AC447090010	N,N-Dimethylformamide, 99.9%, for biochemistry, AcroSeal™	1L, 2.5L	Analyze, Downstream
AAJ61899AK	Paraformaldehyde, 4% in PBS	250ml, 500ml	Analyze, Downstream
AA4372818	Polyvinylpyrrolidone, M.W. 1,300,000	50g, 250g, 1kg	Analyze, Downstream
AC447810250	Sodium azide, 99+%, for biochemistry	25g, 100g, 500g	Process, Downstream

## Apoptosis

Fisher Scientific Cat. No.	Product Description	Size	Workflow Step
AAJ63522LBO	Antimycin A	5mg, 10mg	Analyze, Downstream
AAJ62340MA	Brefeldin A, 98%	10mg, 25mg, 50mg	Analyze, Downstream
AAJ62523MD	Camptothecin	250mg, 1g, 5g	Analyze, Downstream
AAJ6043303	Carboplatin	1g, 5g	Analyze, Downstream
AC227120050	Colchicine, 97%	500mg, 1g, 5g, 25g	Analyze, Downstream
AAJ60174MC	Docetaxel, 99%	100mg, 500mg, 1g	Analyze, Downstream
AAJ64000MA	Doxorubicin hydrochloride	10mg, 50mg	Analyze, Downstream
AC117740025	Ellagic acid, 97%	2.5g, 10g, 50g	Analyze, Downstream
AAH26425MB	Hypericin, 98%	25mg, 100mg, 5g, 25g	Analyze, Downstream
AAJ60373MF	Kaempferol, 98+%	50mg	Analyze, Downstream
AAJ6245206	Melatonin, 99+%	5g, 25g	Analyze, Downstream
AAJ63193MA	Mitomycin C	10mg	Analyze, Downstream
AAJ64206MC	N,N,N',N'-Tetrakis-(2-pyridylmethyl)ethylenediamine	100mg, 300mg	Analyze, Downstream
AC456131000	Oxaliplatin, 99%	100mg	Analyze, Downstream
AAJ62734MC	Paclitaxel, 99.5+%	100mg, 500mg, 1g	Analyze, Downstream
AAJ61707MD	Suramin hexasodium salt, 98+%	250mg, 500mg, 1g	Analyze, Downstream
AAJ63509ME	Tamoxifen, 98%	500mg, 1g, 5g	Analyze, Downstream
AAJ63803ME	Toremifene, 98+%	500mg, 1g	Analyze, Downstream

## Antibiotics

Fisher Scientific Cat. No.	Product Description	Size	Workflow Step
AAB2084114	(R,R)-Chloramphenicol, 98%	25g, 100g	Grow, Upstream
AC257711000	4-Epioxytetracycline, 'can be used as secondary standard'	100mg	Grow, Upstream
AC233121000	4-Epitetracycline hydrochloride, 'can be used as a secondary standard'	100mg, 500mg	Grow, Upstream
AC233131000	Anhydrotetracycline hydrochloride, 'can be used as a secondary standard'	100mg, 500mg	Grow, Upstream
AAJ6194903	Carbenicillin disodium salt	1g, 5g, 25g	Grow, Upstream
AC227920250	Chloramphenicol, 98%	25g, 100g, 500g	Grow, Upstream
AC357420010	Cycloheximide, 95%	1g, 5g, 25g	Grow, Upstream
AC228480010	D-Cycloserine, 98%	1g, 5g, 25g	Grow, Upstream
AC118680050	Ethylmercurithiosalicylic acid, sodium salt, 97.0-101.0%	5g, 25g, 100g, 500g	Grow, Upstream
AAJ60681MC	Hygromycin B	100mg, 250mg, 1g	Grow, Upstream
AAJ1792406	Kanamycin sulfate, Ultrapure, Thermo Scientific	5g, 25g	Grow, Upstream
AC226940020	Mitomycin C, contains 2 mg Mitomycin C and 48 mg NaCl	2mg	Grow, Upstream
AAJ6242709	Oxytetracycline, 96%	10g, 50g, 100g	Grow, Upstream
AAJ67236XF	Puromycin dihydrochloride, 10 mg/ml in distilled water, sterile-filtered	1mL, 5 x 1mL	Grow, Upstream
AAJ62473MF	Rapamycin, 98+%	50mg, 100mg, 200mg	Grow, Upstream
AAJ6182006	Spectinomycin dihydrochloride pentahydrate, Cell Culture Grade	5g, 25g	Grow, Upstream
AAA1300122	Sulfanilamide, 98%	100g, 500g, 2.5kg	Grow, Upstream
AAJ6279003	Vancomycin hydrochloride, Molecular Biology Grade	1g, 5g	Grow, Upstream
AAJ67140XF	Zeocin™, 100 mg/ml in HEPES, sterile-filtered	1mL, 5 x 1mL	Grow, Upstream
AAJ67193XF	Bafilomycin A1, 0.1 mg/ml in DMSO, sterile-filtered	1mL	Grow, Upstream

AAJ66972AB	Ampicillin, Ready-to-Use aqueous soln., 100mg/mL, 0.2 micron filtered	10mL, 25mL	Grow, Upstream
AAJ6057914	Doxycycline hyclate	25g, 100g	Grow, Upstream
AAH37154MC	Nourseothricin sulfate	100mg, 1g	Grow, Upstream
AAJ67460XF	Mitomycin C, 5 mg/ml in DMSO, sterile-filtered	1mL	Grow, Upstream
AAJ66802MC	Bialaphos sodium, 85%	100mg, 500mg	Grow, Upstream
AAJ60727MCR	Bleomycin sulfate	1mg, 10mg	Grow, Upstream
AAJ67371XF	Hygromycin B, 50 mg/ml in distilled water, sterile-filtered	1mL, 5x1mL	Grow, Upstream

## Biological stains

Fisher Scientific Cat. No.	Product Description	Size	Workflow Step
AC227900250	Acid Fuchsin, pure, high purity biological stain	25g, 100g, 500g	Analyze, Downstream
AAA1295206	Basic Fuchsin	5g, 25g, 100g	Analyze, Downstream
AC229590250	Brilliant cresyl Blue, pure, high purity biological stain	10g, 25g	Analyze, Downstream
AC229601000	Brilliant Green, pure, high purity biological stain	100g, 500g	Analyze, Downstream
AC190200050	Carmine, pure, high purity biol.stain, alum lake of carminic acid	5g, 25g, 100g	Analyze, Downstream
AC153230050	Giemsa Stain, pure, high purity biological stain	5g, 25g	Analyze, Downstream
AC191680250	Janus Green B, pure, high purity biological stain	5g, 25g	Analyze, Downstream
AAB2333009	Light Green SF Yellowish	10g, 50g	Analyze, Downstream
AC189480250	Nigrosine, pure, water soluble, high purity biological stain	25g, 100g	Analyze, Downstream
AC229820250	Orange G, 85+%, pure, high purity biological stain	25g, 100g	Analyze, Downstream
AC227880050	Pararosaniline chloride, pure, high purity biological stain	5g, 25g, 100g, 500g	Analyze, Downstream
AC189470050	Phloxine B, 85%, pure, high purity, Biological stain	5g, 25g	Analyze, Downstream
AC200100010	Pyronin Y, pure, high purity biological stain	1g, 5g, 25g	Analyze, Downstream
AC418900010	Resazurin, sodium salt, pure, high purity biological stain	1g, 5g, 25g	Analyze, Downstream
AAJ6023003	Nitro Blue Tetrazolium chloride, 98+%	1g, 5g	Analyze, Downstream
AAJ6082314	Methylene Blue trihydrate	25g, 100g, 250g	Analyze, Downstream
AAJ6028103	Nitrazine Yellow	1g, 5g, 25g	Analyze, Downstream
AAH3186803	Benzothiazole-6-carboxylic acid, 96%	5g, 25g	Analyze, Downstream
AC189470050	Phloxine B, 85%, pure, high purity, Biological stain	5g, 25g	Analyze, Downstream
AAA1790314	Wright's Stain	25g, 100g	Analyze, Downstream

## Detergents

Fisher Scientific Cat. No.	Product Description	Size	Workflow Step
AAJ6492818	N-Lauroylsarcosine sodium salt, ultrapure, 97%	50g	Process, Downstream
AAL15029AE	Polysorbate 20	100mL, 500mL	Process, Downstream
AAL13315AE	Polysorbate 80	100mL, 500mL, 2500mL	Process, Downstream
AAJ6228814	Sodium deoxycholate monohydrate, 97%	25g, 100g, 250g	Process, Downstream
AC464252500	Tergitol™ 15-S-9	250mL, 1L, 2.5L, 10L	Process, Downstream
AC422365000	Triton™ X-114	500mL, 2.5L	Process, Downstream
AAJ66624AE	Triton™ X-100, Electrophoresis Reagent	100mL, 500mL, 2500mL	Process, Downstream
AAJ62990AK	RBC lysis buffer for human	250mL, 500mL	Process, Downstream
AAJ62524AD	RIPA buffer (5X)	50mL, 100mL	Process, Downstream
AAJ62150AK	RBC lysis buffer for mouse	250mL, 500mL	Process, Downstream
AAJ62289AK	Triton™ X-100 lysis buffer, pH 7.4	250mL, 500mL	Process, Downstream



thermo scientific



For more information, visit [fishersci.com/research-chemicals](https://fishersci.com/research-chemicals)  
or [fishersci.ca/research-chemicals](https://fishersci.ca/research-chemicals)

Distributed by Fisher Scientific. Contact us today:

**In the United States**

Order online: [fishersci.com](https://fishersci.com)

Call customer service: 1-800-766-7000

**In the Canada**

Order online: [fishersci.ca](https://fishersci.ca)

Call customer service: 1-800-234-7437

 **fisher** scientific  
part of Thermo Fisher Scientific