

# Cell Culture Media Quick Reference Guide

## Cell Culture Essentials

Whether you're seeding starter cultures, analyzing field samples, or feeding bioreactors, Corning's high-performance media, sera, and reagents can help to ensure consistent, repeatable results. This quick reference guide is intended to help you choose the right cell culture media products to support your cell types and objectives.

Task	You will need*
Cell detachment	<ul style="list-style-type: none"> <li>• Trypsin</li> <li>• Corning® Cellstripper®</li> <li>• Accutase®</li> </ul>
Lymphocyte separation	<ul style="list-style-type: none"> <li>• LSM (Lymphocyte Separation Medium)</li> </ul>
Cell washing	<ul style="list-style-type: none"> <li>• PBS (Phosphate-Buffered Saline)</li> <li>• DPBS (Dulbecco's Phosphate-Buffered Saline)</li> <li>• HBSS (Hank's Balanced Salt Solution)</li> </ul>
Cell viability counts	<ul style="list-style-type: none"> <li>• Trypan blue</li> </ul>
Contamination: microbial	<ul style="list-style-type: none"> <li>• Penicillin-Streptomycin solution</li> <li>• Gentamicin</li> </ul>
Contamination: fungal	<ul style="list-style-type: none"> <li>• Amphotericin B</li> </ul>
Contamination: microbial and/or fungal	<ul style="list-style-type: none"> <li>• Antibiotic-Antimycotic solution</li> </ul>
Contamination: mycoplasma	<ul style="list-style-type: none"> <li>• Ciprofloxacin Hydrochloride</li> </ul>
Cryopreservation	<ul style="list-style-type: none"> <li>• DMSO (Dimethyl Sulfoxide)</li> </ul>
Supplementation Transfection**	<ul style="list-style-type: none"> <li>• Corning transfectagro™ reduced serum medium</li> <li>• DMEM (Dulbecco's Modification of Eagle's Medium) without phenol red</li> <li>• DMEM/Ham's F-12 50/50 Mix</li> <li>• MEM (Minimum Essential Medium)</li> <li>• FBS (Fetal Bovine Serum)</li> </ul>

\*See product listing for more information

\*\*Do not wash cells with DPBS/PBS prior to transfection

## Common Cell Lines

The cell culture medium recommendations for these common cell lines (not sold by Corning) are to be used only as a guideline, as these cells may be successfully propagated in other media. It is best to follow the recommendation of the cell repository.

Cell Line	Cell Type	Species	Tissue	Medium
3T6	Fibroblast	Mouse	Embryo	DMEM and 10% FBS
A549	Epithelial	Human	Lung carcinoma	F-12K and 10% FBS
A9	Fibroblast	Mouse	Connective tissue	DMEM and 10% FBS
AtT-20	Epithelial	Mouse	Pituitary tumor	F-10, 15% horse serum and 2.5% FBS
BALB/3T3	Fibroblast	Mouse	Embryo	DMEM and 10% FBS
BHK-21	Fibroblast	Hamster	Kidney	Glasgow's MEM and 10% FBS or MEM and 10% FBS plus NEAA
BHL-100	Epithelial	Human	Breast	McCoy's 5A and 10% FBS
BT	Fibroblast	Bovine	Turbinate cells	MEM and 10% FBS plus NEAA
Caco-2	Epithelial	Human	Colon adeno carcinoma	MEM and 20% FBS plus NEAA
Chang	Epithelial	Human	Liver	BME (Basal Medium Eagle) and 10% calf serum

## Common Cell Lines, continued

Cell Line	Cell Type	Species	Tissue	Medium
CHO-K1	Epithelial	Hamster	Ovary	F-12 and 10% FBS
Clone 9	Epithelial	Rat	Liver	F-12K and 10% FBS
Clone M-3	Epithelial	Mouse	Melanoma	F-10, 15% horse serum and 2.5% FBS
COS-1, COS-3, COS-7	Fibroblast, SV40 transformed	Monkey	Kidney	DMEM and 10% FBS
CRFK	Epithelial	Cat	Kidney	MEM and 10% FBS plus NEAA
CV-1	Fibroblast	Monkey	Kidney	MEM and 10% FBS
D-17	Epithelial	Dog	Osteosarcoma	MEM and 10% FBS and NEAA
Daudi	Lymphoblast	Human	Blood from a lymphoma patient	RPMI-1640 and 10% FBS
EB-3	B Lymph	Human	Lymphoma	RPMI-1640 and 10% FBS
GH1, GH3	Epithelial	Rat	Pituitary tumor	F-10, 15% horse serum, and 2.5% FBS
H9	Lymphoblast	Human	T-cell lymphoma	RPMI-1640 and 20% FBS
HaK	Epithelial	Hamster	Kidney	BME and 10% calf serum
HCT-15	Epithelial	Human	Colorectal adenocarcinoma	RPMI-1640 and 10% FBS
HEK-293	Unknown	Human	Embryonic kidney	MEM and 10% FBS plus NEAA
HeLa	Epithelial	Human	Cervix carcinoma	MEM and 10% FBS plus NEAA (in suspension, S-MEM)
HEp-2	Epithelial	Human	Larynx carcinoma (suspected HeLa contaminated)	MEM and 10% FBS
HL-60	Lymphoblast	Human	Promyelocytic leukemia	RPMI-1640 and 20% FBS
HT-1080	Epithelial	Human	Fibrosarcoma	MEM and 10% FBS plus NEAA
HT-29	Epithelial	Human	Colon adenocarcinoma	McCoy's 5A and 10% FBS
HUVEC	Endothelial	Human	Umbilical vein	F12K, 10% FBS, Heparin 100 µg/mL, endothelial cell growth supplement 50 mg/mL
I-10	Epithelial	Mouse	Testicular tumor	F-10, 15% horse serum, and 2.5% FBS
IM-9	Lymphoblast	Human	Marrow from myeloma patient	RPMI-1640 and 10% FBS
JEG-2	Epithelial	Human	Choriocarcinoma	MEM and 10% FBS
Jensen	Fibroblast	Rat	Sarcoma	McCoy's 5A and 5% FBS
Jurkat	Lymphoblast	Human	Lymphoma	RPMI-1640 and 10% FBS
K-562	Lymphoblast	Human	Myelogenous leukemia	RPMI-1640 and 10% FBS
KB	Epithelial	Human	Oral carcinoma	MEM and 10% FBS plus NEAA
KG-1	Myeloblast	Human	Marrow from erythroleukemia patient	IMDM (Iscove's Modification of DMEM) and 20% FBS
L2	Epithelial	Rat	Lung	F-12K and 10% FBS
LLC-WRC 256	Epithelial	Rat	Carcinoma	Medium 199 and 5% horse serum
McCoy	Fibroblast	Mouse	Unknown	MEM and 10% FBS
MCF7	Epithelial	Human	Breast adenocarcinoma	MEM and 10% FBS plus NEAA and 10 µg/mL insulin
MRC-5	Fibroblast	Human	Lung	MEM and 10% FBS plus NEAA
NIH-3T3	Fibroblast	Mouse	Embryo	DMEM and 10% FBS
Schneider 2 (S2), D.Mel-2	–	Fruit fly	–	Corning® insectagro® DS2 medium
Sf9, Sf21	–	Fall armyworm	Pupal ovary	Hink's TNM-FH and 10% FBS; Corning insectagro Sf9
VERO	Epithelial	Monkey	Kidney	MEM and 10% FBS plus NEAA
WI-38	Epithelial	Human	Embryonic lung	BME and 10% FBS
WISH	Epithelial	Human	Amnion	BME and 10% FBS
XC	Epithelial	Rat	Sarcoma	MEM and 10% FBS plus NEAA
Y-1	Epithelial	Mouse	Tumor of adrenal	F-10, 15% horse serum, and 2.5% FBS

## Ordering Information

### Classical Media

Fisher Scientific Cat. No.	Corning Cat. No.	Description	Unit Size	Qty/Pk
15313531	10-010-CV	MEM (Minimum Essential Medium) with Earle's salts and L-glutamine	500 mL	6
15363591	10-010-CM	MEM with Earle's salts and L-glutamine	1L	6
15303571	17-305-CV	MEM with Earle's salts, without L-glutamine and phenol red	500 mL	6
15343531	10-016-CV	Iscove's Modification of DMEM with L-glutamine and 25 mM HEPES, without $\alpha$ -thioglycerol and $\beta$ -mercaptoethanol	500 mL	6
15313601	10-016-CM	Iscove's Modification of DMEM with L-glutamine and 25 mM HEPES, without $\alpha$ -thioglycerol and $\beta$ -mercaptoethanol	1L	6
15303541	10-040-CV	RPMI 1640 with L-glutamine	500 mL	6
15343601	10-040-CM	RPMI 1640 with L-glutamine	1L	6
15353531	10-017-CV	DMEM (Dulbecco's Modified Eagle's Medium) with 4.5 g/L glucose and L-glutamine, without sodium pyruvate	500 mL	6
15323601	10-017-CM	DMEM with 4.5 g/L glucose and L-glutamine, without sodium pyruvate	1L	6
15323531	10-013-CV	DMEM with 4.5 g/L glucose, L-glutamine, and sodium pyruvate	500 mL	6
15373591	10-013-CM	DMEM with 4.5 g/L glucose, L-glutamine, and sodium pyruvate	1L	6
15383561	17-205-CV	DMEM with 4.5 g/L glucose and sodium pyruvate, without L-glutamine and phenol red	500 mL	6
15353781	90-013-PB	DMEM with 4.5 g/L glucose, sodium pyruvate, without L-glutamine and phenol red, powder	10L	1
15303791	90-113-PB	DMEM without sodium bicarbonate, glucose, L-glutamine, sodium pyruvate, and phenol red, powder	10L	1
15373541	10-090-CV	DMEM/Ham's F-12 50/50 Mix with L-glutamine	500 mL	6
15313611	10-090-CM	DMEM/Ham's F-12 50/50 Mix with L-glutamine	1L	6
15383781	90-090-PB	DMEM/Ham's F-12 50/50 Mix without sodium bicarbonate, L-glutamine, and phenol red, powder	10L	1
15383541	10-092-CV	DMEM/Ham's F-12 50/50 Mix with L-glutamine and 15 mM HEPES	500 mL	6
15323611	10-092-CM	DMEM/Ham's F-12 50/50 Mix with L-glutamine and 15 mM HEPES	1L	6
15353561	16-405-CV	DMEM/Ham's F-12 50/50 Mix with L-glutamine, without phenol red	500 mL	6

### Salt Solutions

15363571	21-021-CV	HBSS (Hank's Balanced Salt Solution), 1X, without calcium and magnesium	500 mL	6
15303631	21-021-CM	HBSS, 1X, without calcium and magnesium	1L	6
15373571	21-022-CV	HBSS, 1X, without calcium, magnesium, and phenol red	500 mL	6
15313631	21-022-CM	HBSS, 1X, without calcium, magnesium, and phenol red	1L	6
15313581	21-040-CV	PBS (Phosphate-Buffered Saline), 1X, without calcium and magnesium	500 mL	6
15373631	21-040-CM	PBS, 1X, without calcium and magnesium	1L	6
15316257	46-013-CM	PBS, 10X, pH 7.4, without calcium and magnesium	1L	6
15393571	21-030-CV	DPBS (Dulbecco's Phosphate-Buffered Saline), 1X, with calcium and magnesium	500 mL	6
15333631	21-030-CM	DPBS, 1X, with calcium and magnesium	1L	6
15303581	21-031-CV	DPBS, 1X, without calcium and magnesium	500 mL	6
15343631	21-031-CM	DPBS, 1X, without calcium and magnesium	1L	6
15363631	21-031-LX	DPBS, 1X, without calcium and magnesium	10L	1
15353631	21-031-LB	DPBS, 1X, without calcium and magnesium	20L	1
15333571	20-030-CV	DPBS, 10X, with calcium and magnesium	500 mL	6
15343571	20-031-CV	DPBS, 10X, without calcium and magnesium	500 mL	6

### Specialty Media

15363661	25-072-CI	LSM (Lymphocyte Separation Medium)	100 mL	1
15373661	25-072-CV	LSM	500 mL	1

### Serum

15377636	35-079-CV	FBS (Fetal Bovine Serum), regular, South American Origin	500 mL	1
15399906	35-015-CV	FBS, premium, US Origin	500 mL	1
15313701	35-076-CV	FBS, premium, Australian Origin	500 mL	1

## Ordering Information, continued

### Cell Culture Reagents

Fisher Scientific Cat. No.	Corning Cat. No.	Description	Unit Size	Qty/Pk
15303681	30-234-CR	G418 Sulfate, liquid 50 mg/mL solution	20 mL	1
15393671	30-234-CI	G418 Sulfate, liquid 50 mg/mL solution	100 mL	1
15303771	61-234-RF	G418 Sulfate, powder	1 g	1
15313771	61-234-RG	G418 Sulfate, powder	5 g	1
15323771	61-234-RK	G418 Sulfate, powder	50 g	1
15323661	25-060-CI	HEPES, liquid 1M solution (238.3 mg/mL)	100 mL	6
15393641	25-050-CI	Trypsin 1X, 0.25% Trypsin in HBSS without calcium and magnesium, Porcine Parvovirus tested	100 mL	6
15303651	25-051-CI	Trypsin EDTA 1X, 0.05% Trypsin/0.53 mM EDTA in HBSS without calcium and magnesium, Porcine Parvovirus tested	100 mL	6
12739716	25-052-CI	Trypsin EDTA 1X, 0.05% Trypsin/0.53 mM EDTA in HBSS without calcium and magnesium, Porcine Parvovirus tested	100 mL	6
15323651	25-052-CV	Trypsin EDTA 1X, 0.05% Trypsin/0.53 mM EDTA in HBSS without calcium and magnesium, Porcine Parvovirus tested	500 mL	6
15333651	25-053-CI	Trypsin EDTA 1X, 0.25% Trypsin/2.21 mM EDTA in HBSS without sodium bicarbonate, calcium and magnesium, Porcine Parvovirus tested	100 mL	6
15343651	25-054-CI	Trypsin 10X, 2.5% Trypsin in HBSS without calcium, magnesium, and phenol red, Porcine Parvovirus tested	100 mL	6
13271914	25-056-CI	Corning® Cellstripper®, liquid	100 mL	6
15323609	25-058-CI	Accutase® Cell Detachment Solution	100 mL	1
15393661	25-900-CI	Trypan Blue solution (w/v) in PBS 0.4%, (w/v) in normal saline (8.1 g/L NaCl with 0.6 g/L K <sub>2</sub> HPO <sub>4</sub> )	100 mL	1
15313671	30-001-CI	Penicillin-Streptomycin solution, 50X, 5,000 I.U. Penicillin (per mL), 5,000 µg/mL Streptomycin	100 mL	6
15356247	30-002-CI	Penicillin-Streptomycin solution, 100X, 10,000 I.U. Penicillin, 10,000 µg/mL Streptomycin	100 mL	6
15373671	30-009-CI	Penicillin-Streptomycin-L-Glutamine, 100X, 10,000 I.U. Penicillin (per mL), 10,000 µg/mL Streptomycin, 29.2 mg/mL L-glutamine	100 mL	6
15333671	30-003-CF	Amphotericin B, liquid 250 µg/mL solubilized	50 mL	6
15343671	30-004-CI	Antibiotic-Antimycotic solution, 10,000 I.U. Penicillin (per mL) 10,000 µg/mL Streptomycin 25 µg/mL, Amphotericin with 8.5 g/L NaCl	100 mL	6
15303761	61-098-RA	Gentamicin Sulfate, powder	100 mg	1
15313761	61-098-RF	Gentamicin Sulfate, powder	1 g	1
15383771	61-277-RF	Ciprofloxacin Hydrochloride, powder	1 g	1
15303671	25-950-CQC	DMSO (Dimethyl Sulfoxide)	250 mL	1

### Water

15373581	25-055-CM	Water, cell culture grade, tested to USP sterile WFI specifications	1L	6
15303711	46-000-CM	Water, molecular biology grade, tested to the chemical and physical properties found in the USP monograph for sterile purified water	1L	6

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