

Media and Reagents for Cytogenetics

- **Optimized and prequalified for cytogenetics**
- **Produce clear, reproducible results that are easy to analyze and interpret**

Every day, you make critical decisions based on what you see through a microscope. GIBCO® products for cytogenetics give everything you need to have confidence in your conclusions.

You'll get clear, reproducible results that are simple to analyze and interpret with the most trusted cell culture media and reagents for cytogenetics: MarrowMAX™, AmnioMAX™, PB-MAX™, and KaryoMAX® products.

Optimized for Cytogenetics, Certified for Consistency

MarrowMAX™, AmnioMAX™, PB-MAX™, and KaryoMAX® products are specifically formulated and application tested by an independent laboratory to deliver clear, reproducible results in standard clinical cytogenetic protocols involving the analysis of bone marrow cells, amniotic fluid cells, chorionic villus samples, and peripheral blood lymphocytes.

Our production process and strict quality control ensure that every lot of MarrowMAX™, AmnioMAX™, PB-MAX™, and KaryoMAX® product will support healthy cell morphology and rapid culture growth.

Peace of Mind with Each Product

For over 40 years, GIBCO® products for cell culture have set the global standard for quality and reliability.

Our products for cytogenetics are manufactured in compliance with the FDA's Quality System Regulation (cGMP) and the current requirements of ISO 9001 at our Grand Island, New York facility.

You can rest assured that we maintain rigorous control of all production stages, from raw materials to finished product. Our controlled manufacturing process and decades of experience ensure lot-to-lot consistency and reproducible performance.

We Know What Matters

At Invitrogen, we understand the high level of service and support required in cytogenetics laboratories, so we strive to help you in every way possible.

Have questions? Need data? Call Cell Culture Technical Services, 1-800-955-6288 or go to www.invitrogen.com.



Clearly Superior Morphology

Figure 1. Chromosome spread from normal bone marrow cells cultured in GIBCO® MarrowMAX™ Bone Marrow Medium for 24 hours.

GIBCO® Media and Reagents for Cytogenetics

Description	Catalog No.	Size
MarrowMAX™ Bone Marrow Medium (contains Gentamicin) <i>Recommended storage condition: -5°C to -20°C</i>	12260-014	100 ml
AmnioMAX™-II Complete Medium (contains Gentamicin) <i>Recommended storage condition: -5°C to -20°C</i>	11269-016	100 ml
AmnioMAX™-C100 Complete Medium (system) The system contains both the medium (90 ml) and the supplement (15 ml). (supplement contains Gentamicin)	12558-011	set
AmnioMAX™-C100 Basal Medium, liquid <i>Recommended storage condition: 2°C to 8°C</i>	17001-082 17001-074	90 ml 450 ml
AmnioMAX™-C100 Supplement, liquid <i>Recommended storage condition: -5°C to -20°C</i> (supplement contains Gentamicin)	12556-015 12556-023	15 ml 75 ml
PB-MAX™ Karyotyping Medium Contains fetal bovine serum, phytohemagglutinin, and antibiotics. <i>Recommended storage condition: -5°C to -20°C</i> (supplement contains Gentamicin)	12557-013 12557-021	100 ml 500 ml
KaryoMAX® Colcemid™ Solution, liquid (10 µg/ml), in HBSS	15210-040	10 ml
KaryoMAX® Colcemid™ Solution, liquid (10 µg/ml), in PBS Prepared in Hanks' Balanced Salt Solution or Phosphate-Buffered Saline. <i>Recommended storage condition: 2°C to 8°C</i>	15212-012	10 ml
KaryoMAX® Giemsa Stain Stock Solution	10092-013	100 ml
Antibiotic-Antimycotic (100X), liquid* Prepared with 10,000 units of penicillin (base), 10,000 µg of streptomycin (base), and 25 µg of amphotericin B/ml utilizing penicillin G (sodium salt), streptomycin sulfate, and amphotericin B as Funigizone™ Antimycotic in 0.85% saline. <i>Spectrum:</i> bacteria, fungi, and yeasts <i>Recommended storage condition: -5°C to -20°C</i>	15240-096 15240-062	20 ml 100 ml
Collagenase, lyophilized* Prepared from <i>Cl. histolyticum</i> . <i>E.C. Number:</i> 3.4.2.4.3 <i>Activity:</i> 125 to 200 units/mg weight. One unit will liberate 1 µmol amino acid from collagen, expressed as L-leucine, in 18 h at 37°C <i>Recommended storage condition: 2°C to 8°C</i>	17018-029	500 mg
Fetal Bovine Serum, Certified (US) Performance, mycoplasma, virus, bacteriophage, and endotoxin tested. <i>Endotoxin level:</i> ≤10 EU/ml <i>Hemoglobin level:</i> ≤15 mg/dl <i>Recommended storage condition: -5°C to -20°C</i>	16000-036 16000-044	100 ml 500 ml
Fetal Bovine Serum, Qualified (US) Performance, mycoplasma, virus, and endotoxin tested. <i>Recommended storage condition: -5°C to -20°C</i>	26140-087 26140-079 26140-095	100 ml 500 ml 1,000 ml
Fetal Bovine Serum, Qualified, Heat-Inactivated (US) Performance, mycoplasma, endotoxin, and virus tested. <i>Recommended storage condition: -5°C to -20°C</i>	16140-063 16140-071	100 ml 500 ml

Description	Catalog No.	Size
Fungizone™ Antimycotic, liquid* Prepared with 250 µg of amphotericin B and 205 µg of sodium deoxycholate/ml as a stabilizer in distilled water. <i>Spectrum:</i> fungi and yeasts <i>Recommended concentration:</i> 0.25 to 2.5 µg/ml <i>Recommended storage condition:</i> 2°C to 8°C	15290-018	20 ml
Gentamicin Reagent Solution (10 mg/ml), liquid* Prepared with 10 mg/ml gentamicin sulfate in distilled water. <i>Spectrum:</i> gram-positive and gram-negative bacteria <i>Recommended concentration:</i> 0.5 to 50 µg/ml <i>Recommended storage condition:</i> 15°C to 30°C	15710-064 15710-072	10 ml 10 × 10 ml
Gurr Buffer Tablets (pH 6.8)* Optimized to prepare a liter of buffer at pH 6.8 for dilution of Giemsa stain.	10582-013	50 × 1 L
Hanks' Balanced Salt Solution (HBSS) (1X), liquid Contains no calcium chloride, magnesium chloride, or magnesium sulfate. <i>Recommended storage condition:</i> 15°C to 30°C	14170-120 14170-112 14170-161	100 ml 500 ml 10 × 500 ml
Hanks' Balanced Salt Solution (HBSS) (1X), liquid Contains no calcium chloride, magnesium chloride, magnesium sulfate, or phenol red. <i>Recommended storage condition:</i> 15°C to 30°C	14175-095 14175-079 14175-103	500 ml 1,000 ml 10 × 500 ml
L-Glutamine-200 mM (100X), liquid Supplied at 29.2 mg/ml in 0.85% NaCl. <i>pH:</i> 4.7 to 5.6 <i>Recommended storage condition:</i> -5°C to -20°C	25030-149 25030-081	20 ml 100 ml
Minimal Essential Medium (MEM) Alpha Medium (1X), liquid Supplemented MEM Alpha Contains L-glutamine, ribonucleosides, and deoxyribonucleosides. <i>Recommended storage condition:</i> 2°C to 8°C	12571-063 12571-071 12571-048	500 ml 10 × 500 ml 1,000 ml
Pancreatin 4X USP (10X), liquid* Contains 25.0 g of pancreatin and 8.5 g of NaCl/L. <i>Dilution:</i> Aseptically prepare 1X solution in balanced salt solution without calcium magnesium to achieve a concentration of 2.5 g/L pancreatin <i>Recommended storage condition:</i> -5°C to -20°C •Available as custom formulation.	002-0036DG•	100 ml
Penicillin-Streptomycin, liquid* Prepared with 10,000 units of penicillin (base) and 10,000 µg of streptomycin (base)/ml utilizing penicillin G (sodium salt) and streptomycin sulfate in 0.85% saline. <i>Spectrum:</i> gram-positive and gram-negative bacteria <i>Recommended storage condition:</i> -5°C to -20°C	15140-148 15140-122	20 ml 100 ml
Penicillin-Streptomycin, liquid* Prepared with 5,000 units of penicillin (base) and 5,000 µg of streptomycin (base)/ml utilizing penicillin G (sodium salt) and streptomycin sulfate in 0.85% saline. <i>Spectrum:</i> gram-positive and gram-negative bacteria <i>Recommended storage condition:</i> -5°C to -20°C	15070-063	100 ml
Penicillin-Streptomycin-Glutamine (100X), liquid* Contains 10,000 units of penicillin (base), 10,000 µg streptomycin (base), and 29.2 mg of L-Glutamine/ml in 0.85% saline, in a 10 mM citrate buffer to maintain penicillin potency. Utilizes penicillin G (sodium salt) and streptomycin sulfate. <i>Spectrum:</i> gram-positive and gram-negative bacteria <i>Recommended storage condition:</i> -5°C to -20°C	10378-016	100 ml

Description	Catalog No.	Size
Phytohemagglutinin (M Form) (PHA), lyophilized* Lyophilized extract of the red kidney bean <i>Phaseolus vulgaris</i> . Capable of inducing blastogenesis <i>in vitro</i> in various mammalian mononuclear cells. PHA is a crude sodium chloride extract of beans that have been homogenized in a saline solution at 2°C to 8°C. <i>Concentration:</i> Because of the undefined nature of this extract, we are not able to assign weight/volume values on the active material in our final product. <i>End use:</i> 1 to 2 ml of rehydrated PHA per 100 ml of culture medium. Note: PHA may appear cloudy at refrigerated temperatures (2°C to 8°C). This turbidity should clear as the rehydrated solution is brought to room temperature. <i>Recommended storage condition before rehydration:</i> 2°C to 8°C <i>Recommended storage condition after rehydration:</i> -5°C to -20°C	10576-015	10 ml
Potassium Chloride Solution, 0.075 M A premixed 0.075 M hypotonic solution. <i>Recommended storage condition:</i> 2°C to 8°C	10575-090	4 × 100 ml
RPMI 1640 (1X), liquid Contains L-glutamine and phenol red. <i>Recommended storage condition:</i> 2°C to 8°C	11875-101 11875-127 11875-093 11875-119 11875-085 11875-135	100 ml 20 × 100 ml 500 ml 10 × 500 ml 1,000 ml 6 × 1,000 ml
RPMI 1640 (1X), liquid (Folate-Free)* Contains L-glutamine, but no folic acid. <i>Recommended storage condition:</i> 2°C to 8°C	27016-021	500 ml
Trypsin, 2.5% (10X), liquid* Porcine parvovirus and mycoplasma tested. Contains 25 g/L of trypsin (1:250) and 8.5 g/L of NaCl, but no phenol red. <i>Source:</i> porcine <i>Recommended storage condition:</i> -5°C to -20°C	15090-046	100 ml
Water, distilled* Membrane filtered, cell culture tested, and endotoxin screened.	15230-162 15230-147 15230-196 15230-204	500 ml 1,000 ml 20 × 100 ml (case) 10 × 500 ml (case)



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