

# Lab-Partner for Life<sup>SM</sup>

## Cell Culture Products

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### **Warranty and Limitation of Liability**

Axenia BioLogix LLC (Axenia) warrants that the products offered in this document are intended for their labeled purposes only. Any Axenia product which does not meet label specifications, and which is returned to Axenia within 30 days of initial receipt, will either be replaced with like material or the purchase price of the product will be refunded, at Axenia's sole discretion. Axenia reserves the right to conduct any analyses it considers appropriate in connection with this warranty.

Axenia reserves the right not to replace the product or provide a refund pursuant to this limited warranty if it reasonably determines that the product has been altered by improper storage, adulteration, treatment or other processing.

The foregoing limited warranty is in lieu of all other warranties, expressed or implied, including implied warranties of merchantability and fitness for a particular purpose. By acceptance of shipments from Axenia BioLogix, buyer explicitly recognizes and agrees that Axenia BioLogix shall not be responsible for lost profits, indirect or consequential damages incurred by the buyer or third parties, including, but not limited to, personal injuries resulting from use of any of Axenia's products.

The information in this document concerning product specifications, descriptions, prices and storage conditions is effective November 9, 2014 and supersedes all previous documents.

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# Certified Cell Culture Sera

## FETAL BOVINE SERA

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### CultraPure™ Fetal Bovine Serum

We are very proud of our CultraPure™ fetal bovine serum (FBS). This critical cell culture component originates exclusively from sources in the United States. Our proprietary collection process ensures the optimum quality of our raw material. CultraPure™ FBS exceeds the highest standards for endotoxin content and supports the growth of the broadest spectrum of cell types.

- ∂ 100% US origin*
- ∂ Multi-pass sterile-filtered to 100nm*
- ∂ Mycoplasma- and virus-screened*
- ∂ Free product storage and/or heat-inactivation upon request*
- ∂ Ships on dry ice. Store below -20°C*

**Product ID F001 (F002 for heat-inactivated)**

**500 mL**

**50 mL**

## SPECIALIZED FETAL BOVINE SERA

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### Purist™ Stem Cell Qualified Fetal Bovine Serum

Strictly speaking, FBS for use with stem cells cannot be manufactured; rather, high-quality FBS must be screened against sentinel stem cell types for non-differentiation over several splittings. Axenia BioLogix contracts with well respected, third party stem cell laboratories to analyze each new lot of our CultraPure™ FBS for its capacity to sustain undifferentiated cellular morphology and characteristic *in-vitro* behavior. Our Purist™ label is reserved for those few lots that satisfy the stringent performance specifications established for these analyses. This exceptional product derives exclusively from our CultraPure™ FBS and so is always of United States origin.

- ∂ 100% US origin*
- ∂ Multi-pass sterile-filtered to 100nm*
- ∂ Mycoplasma- and virus-screened*
- ∂ Free product storage and/or heat-inactivation upon request*
- ∂ Ships on dry ice. Store below -20°C*

**Product ID F100 (F101 for heat-inactivated)**

**500 mL**

**50 mL**

## NON-FETAL ANIMAL SERA

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### Rabbit Serum

Our rabbit serum is collected exclusively from Californian rabbits of 8 to 12 weeks of age.

- ∂ 100% US origin*
- ∂ Sterile-filtered to 200nm*
- ∂ Mycoplasma- and virus-screened*
- ∂ Free product storage and/or heat-inactivation upon request*
- ∂ Ships on dry ice. Store below -20°C*

**Product ID A008**

**100 mL**

# Supplements & Reagents

## AMINO ACID SUPPLEMENTS

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### Q-Max™ Solution

Under normal conditions, L-glutamine (abbreviated as Gln or Q) is the most abundant non-essential amino acid found in mammalian blood. However, this mono-peptide is notoriously unstable in solution—decomposing and ammonifying cell culture media. The effect of this process carries two implications for cells grown in vitro: the ammonification can be disastrously toxic and the bioavailability of L-glutamine is quickly reduced below required levels. Axenia BioLogix has formulated Q-Max™ as a stabilized solution of the dipeptide, L-alanyl-L-glutamine. The addition of this alanyl residue prevents normal glutamine decomposition, markedly increasing culture life. Our Q-Max™ solution is prepared in a convenient concentration of 200mM (100x); simply add 10mL to each liter of growth media.

∂ *Sterile-filtered to 200nm*

∂ *Ships on dry ice. Store below -20°C*

**Product ID S001**

**100 mL**

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## Q-Max™ + PenStrep Solution

Under normal conditions, L-glutamine (abbreviated as *Gln* or *Q*) is the most abundant non-essential amino acid found in mammalian blood. However, this mono-peptide is notoriously unstable in solution—decomposing and ammonifying cell culture media. The effect of this process carries two implications for cells grown *in vitro*: the ammonification can be disastrously toxic and the bioavailability of L-glutamine is quickly reduced below required levels. Axenia BioLogix has formulated Q-Max™ as a stabilized solution of the dipeptide, L-alanyl-L-glutamine. The addition of this alanyl residue prevents normal glutamine decomposition, markedly increasing culture life.

Our Q-Max™ + PenStrep solution carries the addition of penicillin G and streptomycin sulfate to help control potential bacterial contamination. This solution is prepared in a convenient 100x concentration; simply add 10mL to each liter of growth media.

∂ *Sterile-filtered to 200nm*

∂ *Ships on dry ice. Store below -20°C*

**Product ID S002**

**100 mL**



## CELL DISSOCIATION REAGENTS

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### **1X Trypsin-EDTA Solution (0.25%) w/Phenol Red**

This optimized blend of 0.25% trypsin (1:250) and 1mM EDTA in HBSS is a perfect, gentle solution for most animal cell dissociation needs. This product contains phenol red as a pH indicator and is free of divalent calcium and magnesium ions.

- ∂ Porcine parvovirus screened*
- ∂ Sterile-filtered to 200nm*
- ∂ Ships on dry ice. Store below -20°C*

**Product ID S003**

**100 mL**

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## 1X Trypsin-EDTA Solution (0.25%) w/o Phenol Red

This optimized blend of 0.25% trypsin (1:250) and 1mM EDTA in HBSS is a perfect, gentle solution for most animal cell dissociation needs. This product contains no phenol red to prevent estrogen-analog effects and is free of divalent calcium and magnesium ions.

- ∂ Porcine parvovirus screened*
- ∂ Sterile-filtered to 200nm*
- ∂ Ships on dry ice. Store below -20°C*

**Product ID S005**

**100 mL**

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## 10X Trypsin-EDTA Solution (0.5%) w/o Phenol Red

This optimized blend of 0.5% trypsin and 0.2% EDTA in saline is a perfect, gentle solution for most animal cell dissociation needs. This product contains no phenol red to prevent estrogen-analog effects and is free of divalent calcium and magnesium ions.

- ∂ Porcine parvovirus screened*
- ∂ Sterile-filtered to 200nm*
- ∂ Ships on dry ice. Store below -20°C*

**Product ID S004**

**100 mL**

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## Release!™ Cell Dissociation System

Release!™ CDS is a highly effective enzymatic alternative to trypsin for use in both serum-containing and serum-free cell culture applications. Outperforming both trypsin and Accutase, Release!™ CDS offers gentler, more controlled dissociation with greater viable yields.

It is of 100% vegetable origin, so is always sure to be free of animal-, bacterial- or fungal-origin proteins or viruses.

This product contains no phenol red to prevent estrogen-analog effects and is free of divalent calcium and magnesium ions. Product is provided with an extra supply of optimization buffer to deliver the best performance with any adherent cell type.

∂ *Animal-free*

∂ *Sterile-filtered to 200nm*

∂ *Ships on dry ice. Store below -20°C*

**Product ID S020**

**100 mL**

## ANTIMICROBIALS

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### Amphotericin B (FUNGIZONE®) Solution

Amphotericin B is active against fungi, such as yeasts and molds. This potent antimycotic acts by permeablizing eukaryotic cell membranes. Amphotericin B can damage other eucaryotes and should be used in the lowest effective doses possible. Amphotercin B (FUNGIZONE®) is stable in liquid media for 3 days at 37°C.

This product is formulated at 250 µg/mL and should be used in liquid media at a final concentration of 0.5 to 2.5 µg/mL.

∂ *Aseptically prepared.*

∂ *Ships on dry ice. Store below -20°C*

**Product ID S100**

**100 mL**

*FUNGIZONE® is a registered trademark of E.R. Squibb & Sons, L.L.C..*

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## Antibiotic-Antimycotic Solution

Antibiotic-antimycotic solution functions as a broad-spectrum anti-bacterial and anti-fungal supplement in cell culture media. The concentrations of the constituents in this product are intended for prophylaxis; they are too low to be effectively used against established infections. Anti-Anti is stable in liquid media for 3 days at 37°C.

This product is formulated with 25 µg/mL amphotericin B, 10 KU/mL penicillin G and 10 mg/mL streptomycin sulfate. This solution is prepared in a convenient 100x concentration; simply add 10mL to each liter of growth media.

*∂ Sterile-filtered to 200nm*

*∂ Ships on dry ice. Store below -20°C*

**Product ID S101**

**100 mL**

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## Carbenicillin Powder

Carbenicillin is used in cell culture to select for cells expressing resistance to this penicillin analog. Carbenicillin is an effective antibiotic against Gram- and some Gram+ bacteria. It primarily acts by inhibiting bacterial cell wall synthesis in non-resistant cells. Carbenicillin is stable in liquid media for 3 days at 37°C.

Use in liquid media at 100µg/mL.

*⚠ Ships on ice. Store desiccated at +4°C.*

**Product ID S102**

**5 g**

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## **G418 Sulfate (Geneticin®) Powder**

G418 sulfate is used to select for cells expressing specific resistance to the antibiotic. G418 acts by blocking protein synthesis in non-resistant cells. G418 is stable in liquid media for 8 days at 37°C.

Use in liquid media at 200 to 400 µg/mL.

*⚠ Ships on ice. Store desiccated at +4°C.*

**Product ID S103**

**5 g**

*Geneticin® is a registered trademark of Life Technologies, Inc..*



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## G418 Sulfate (Geneticin®) Solution

G418 sulfate is used to select for cells expressing specific resistance to the antibiotic. G418 acts by blocking protein synthesis in non-resistant cells. G418 is stable in liquid media for 8 days at 37°C.

This product is formulated at 50 mg/mL in solution. Recommended dosage is 4 to 8 mL/L of growth media.

*∂ Sterile-filtered to 200nm*

*∂ Ships on ice. Store at +4°C.*

**Product ID S104**

**25 mL**

*Geneticin® is a registered trademark of Life Technologies, Inc..*

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## Gentamycin Sulfate Powder

Gentamycin is active against Gram- bacteria, Gram+ bacteria and Mycoplasma. Gentamycin acts by inhibiting protein synthesis. Gentamycin is stable in liquid media for 5 days at 37°C.

Use in liquid media at 50 mg/L.

*🔪 Ships on ice. Store desiccated at +4°C.*

**Product ID S105**

**10 g**

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## Gentamycin Sulfate Solution

Gentamycin is active against Gram- bacteria, Gram+ bacteria and Mycoplasma. Gentamycin acts by inhibiting protein synthesis. Gentamycin is stable in liquid media for 5 days at 37°C.

This product is formulated at 50 mg/mL in solution. Recommended dosage is 1 mL/L of growth media.

*∂ Sterile-filtered to 200nm*

*∂ Ships on ice. Store at +4°C.*

**Product ID S106**

**4 x 25 mL**

## Penicillin G Powder

Penicillin G is active against Gram+ bacteria. Penicillin G acts by inhibiting cell wall synthesis. Penicillin G is stable in liquid media for 3 days at 37°C.

Use in liquid media at 100KU/L.

*⌚ Ships at ambient. Store desiccated at +4°C.*

**Product ID S107**

**100 MU**

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## PenStrep™ Solution

PenStrep™ solution functions as a broad-spectrum antibiotic supplement in cell culture media. The concentrations of the constituents in this product are intended for prophylaxis; they are too low to be effectively used against established infections. PenStrep™ is stable in liquid media for 3 days at 37°C.

This product is formulated with 10 KU/mL penicillin G and 10 mg/mL streptomycin sulfate. This solution is prepared in a convenient 100x concentration; simply add 10mL to each liter of growth media.

∂ *Sterile-filtered to 200nm*

∂ *Ships on dry ice. Store below -20°C*

**Product ID S108**

**100 mL**

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## Streptomycin Sulfate Powder

Streptomycin is active against both Gram- and Gram+ bacteria. Streptomycin acts by inhibiting protein synthesis. Streptomycin is stable in liquid media for 3 days at 37°C.

Use in liquid media at 100mg/L.

*🔗 Ships at ambient. Store desiccated at +4°C.*

**PRODUCT ID S109**

**100 g**

## ALBUMINS

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### **FB-Essence™ Bovine Serum Albumin (BSA) Powder**

Axenia's bovine serum albumin (BSA) powder is highly purified and optimized for *in-vitro* cell growth. Similar to AlbuMAX®, FB-Essence™ lyophilized BSA may be used for virtually any intended application of albumin in the laboratory. This top-shelf product is low in endotoxin and essentially free of bovine immunoglobulin G, making it suitable for cell culture and molecular biology alike.

In serum-free or serum-reduced cell culture, the recommended rate of supplementation ranges from 0.5 to 2.5 g/L in liquid media.

- ∂ *100% US origin*
- ∂ *Sterile-filtered to 200nm prior to lyophilization*
- ∂ *Mycoplasma- and virus-screened*
- ∂ *Ships at ambient. Store desiccated at +4°C.*

#### **Product ID S200**

**1 kg**  
**100 g**  
**25 g**

*AlbuMAX® is a registered trademark of Life Technologies, Inc.*

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## Standard-Grade Bovine Serum Albumin Powder

Our standard-grade bovine serum albumin (BSA) powder is highly purified and suitable for many research laboratory applications.

- ∂ *100% US origin*
- ∂ *Sterile-filtered to 200nm prior to lyophilization*
- ∂ *Ships at ambient. Store desiccated at +4°C.*

**Product ID S299**

**1 kg**



## GROWTH FACTORS & SUPPLEMENTS

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### PriMax™ Chicken Embryo Extract

Chicken Embryo Extract (CEE) is commonly used as a nutritional supplement for the primary in vitro culture of muscle, adipose and/or neuronal stem cells.

CEE is prepared as a sterile filtrate (0.2µm). It is offered either as a 20mL frozen aliquot or as a 10ml aliquot that has been lyophilized.

*∂ Sterile-filtered to 200nm*

*∂ Ships on dry ice. Store below -20°C*

**Product ID S300**

**20 mL**

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## **PriMax™ Chicken Embryo Extract Powder**

Chicken Embryo Extract (CEE) is commonly used as a nutritional supplement for the primary in vitro culture of muscle, adipose and/or neuronal stem cells.

CEE is prepared as a sterile filtrate (0.2µm). It is offered either as a 20mL frozen aliquot or as a 10ml aliquot that has been lyophilized.

*∂ Sterile-filtered to 200nm prior to lyophilization*

*∂ Ships at ambient. Store desiccated at +4°C.*

**Product ID S310**

**10 mL eq**

# Specialized Media

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## **CultraLo™ CryoStorage Medium**

CultraLo™ cryostorage medium is a simplified formula of Dulbecco's Modified Eagle Medium, fetal bovine serum and dimethyl sulfoxide. CultraLo™ is compatible with most cell types and is supplied in a ready-to-use dilution: simply spin down cells, re-suspend in CultraLo™ and freeze.

*∂ Sterile-filtered to 200nm*

*∂ Ships on dry ice. Store below -20°C*

**Product ID M001**

**25 mL**

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## **Lab-Partner for Life<sup>SM</sup> Media Solutions**

Axenia BioLogix provides complete cell culture media including sera that are customized to meet the specific needs of our customers. We can provide the same lot of serum and reagents over multiple production runs. The product can be provided with any serum concentration that our customers request. Our Customer Service Department is available to provide special quotations for the desired complete media product on request.