Innovative Life Science Solutions™

PRODUCT DESCRIPTION

M3:BaseA™ Supplemented Culture Media
(with Antibiotics and Phenol Red)

Product Name: **M3:BaseA™**

Product Codes: M300A-100, M300A-500

Product Use: Serum-free, highly enriched liquid culture medium with various growth factors and supplements; for human stem cells and other progenitor and fastidious cell types; member of M3™ media family

Features: GMP quality; sterile; USP grade materials; contains antibiotics

Manufacturer:	**INCELL Corporation LLC**	**Distributor:**	**Charter Medical**
Address:	12734 Cimarron Path	**Address:**	3948-A Westpoint Boulevard
City/State/Zip:	San Antonio, TX 78249	**City/State/Zip:**	Winston-Salem, NC 27103
Phone:	800.364.1765; 210.877.0100	**Phone:**	866.458.3116 (Toll Free)
Email:	info@incell.com	**Email:**	info@chartermedical.com
FAX:	210.877.0200	**FAX:**	336.714.4241

General Description

M3:BaseA is a proprietary, multi-factor, supplemented basal culture media in the M3 Media Family (Table 1). M3:BaseA™ is a serum-free, highly enriched, phenol red-containing, high performance liquid culture media for human stem cells and other progenitor and fastidious cell types, including human tumor cells and tissues. Its counterpart formula without phenol red is M3:BaseAC™..

Table 1. M3™ Media Family: Media Designations and Descriptions

Media Designation	Item Number	Antibiotics	Phenol Red
M3:BaseA™	M300A	Yes	Yes
M3:BaseAC™	M300AC	Yes	No
M3:BaseF™	M300F	No	Yes
M3:BaseFC™	M300FC	No	No
M3:10A™	M310A	Yes	Yes
,M3:10AC™	M310AC	Yes	No
M3:D™	M3DEF	No	Yes
M3:DC™	M3DEC	No	No

The media suffix designations of "F", "A" and "C" refer, respectively, to "Free (F) of antibiotics", contains "Antibiotics" (A: gentamicin (50 µg/mL); clindamycin (6.5 µg/mL) and/ or Amphotericin B (2.5 µg/mL); are in the media, and Clear (C; no phenol red). Numbers after media designations are percent (v/v) serum in formula. Sera can be added to media at preferred concentrations.

Formulation and Packaging

GMP manufactured M3:BaseA™ is an enriched, supplemented basal media that contains salts, amino acids, peptides, multiple growth-promoting supplements, and antibiotics (clindamycin, gentamicin, amphotericin B). M3:BaseA™ media are packaged in 100 mL and 500 mL bottles. Serum or other culture and growth factors are usually added per the needs of the tissue or cell-type, and the intended use. The M3™ media family members are shown in Table 1. M3:D™ is the chemically defined solution of salts, sugars, amino acids, and buffers to which the growth supplements are added to make the M3:BaseA™ media. M3:D™ or M3:DC™ (no phenol red) are commonly used as "control", "holding" or "shift-down" media in studies where M3™ media are being used for growth or in vitro testing, and a control group requires absence of growth stimulating factors.

Use and Methods

As summarized in Tables 2 and 3, respectively focused on humans and animals, an extensive experience with many types of tissues and cells released for growth in culture have successfully used M3™ media. A variety of methods to support cell monolayers and/or suspension cell growth have been used with the suitable M3™ media. Substrates have included standard cell culture plastics, complex biomatrices, meshes and engineered scaffolds.

M3:BaseA™
M3™ Family: Supplemented Culture Media with Antibiotics

Specifications	Acceptance Criteria
Visual	Clear, red to red/orange (with phenol red)
pH (USP <791>)	6.9 to 7.7
Osmolality (USP<785>)	310 mmol/kg to 370 mmol/kg
Sterility: SC (USP <71>)	No microbial growth
Sterility: fTG (USP <71>)	No microbial growth
Mycoplasma (USP <63>)	None detected
Endotoxin (USP <85>)	<2.5 EU/mL
Expiration	18 months from date of manufacture

Manufacturing

M3:BaseA™ is manufactured by sterile 0.22 μm filtration and packaging, using cGMP standards in an ISO Class 7 clean room and ISO Class 5 biosafety cabinet and using USP Standards for QC testing. Raw materials are pre-tested and the final product is checked for endotoxin, sterility (bacteria, fungi, and mycoplasma) and other quality specifications and criteria prior to release and preparation of the Certificate of Analysis.

Table 2. Human Tissues and Cells in M3™ Media for Oncology and Regenerative Medicine Clinical and Research Applications

Human Tissues	Primary Culture Cell Types or Cell Lines [Media]
Adipose (Fat)	Mesenchymal Stem Cells; Stromal vascular fraction regenerative cells [M3:10™]; adipose cells [M3:30™]
Bone Marrow; Bone, Cartilage , Adipocytes	Hematopoietic and mesenchymal stem cells; various types of renewable progenitor cells; Endothelial cells; entire population [M3:20™]; subsets of cells in other M3™ media; induced bone and cartilage and adipocyte outgrowth and/or induction of differentiation
Colon	Primary epithelial and/or mesenchymal support cells [M3:2™] [M3:10™] and INCELL Cell Line NCM460 [M3:10™]
Gastrointestinal	Primary epithelial cells and/or mesenchymal support cells; [M3:2™] [M3:5™] [M3:10™]
Kidney	Primary epithelial cells and/or mesenchymal support cells; [M3:2™] [M3:5™] [M3:10™]
Liver	Primary epithelial cells and/or mesenchymal support cells; [M3:2™] [M3:5™] [M3:10™]
Muscles (Heart; Peripheral; Smooth)	Pericytes; Mesenchymal or Stromal Stem Cells; regenerative cells [M3:10™]
Nucleus pulposus (NP) Intervertebral Disc	NP stem cells; annulus chondrocytes and mesenchymal stem cells; various types progenitor cells [M3:10™]; etc.
Pancreas	Pancreatic islet beta and acinar cells [M3:5™]; etc.
Peripheral or apheresis blood	Circulating or mesenchymal cells; endothelial cells [M3:20™]; subsets of cells in other M3™ media formulas
Placenta	Hematopoietic, endothelial and mesenchymal stem cells; trophoblasts; syncytiotrophoblasts; various renewable progenitor cells; [M3:10™]; others
Skin (adult; foreskin)	Epidermal keratinocytes co-cultures; Dermal Fibroblasts; Mesenchymal cells [M3:10™]; others
Tumors; various	Epithelial, mesenchymal, lymphoid; [M3:10™]; others
Umbilical Cord	Hematopoietic, endothelial and mesenchymal cells; various types of renewable progenitor cells; [M3:10™]; etc.

Table 3. M3™ Complete, Supplemented Media Have Been Used for Animal Tissues and Cells Cultured for Biomedical Research

Cells and Tissues Derived from Adult, Newborn and/or Fetal Sources	
Animal Tissues	**Species & Cultured Cell Types or Cell Lines [Media]**
Adipose (Fat)	Rat, mouse, hamster, rabbit; Mesenchymal Stem Cells; Stromal vascular fraction regenerative cells [M3:10™]; adipose cells [M3:30™]*
Bone Marrow	Rat, mouse, hamster, rabbit; Hematopoietic and mesenchymal stem cells; various types of renewable progenitor cells; Endothelial cells; entire population [M3:20™]; subsets of cells in other M3™ media
Brain & Neural (Spinal)	Rat, mouse: Progenitors; induced differentiation; [M3:5™] [M3:10™]
Colon; Gastrointestinal	Rat, mouse, hamster; Primary epithelial and/or mesenchymal support cells [M3:2™]; [M3:5™]; [M3:10™] or complex tissues in organ-like cultures
Kidney	Rat, mouse, hamster; Primary epithelial cells and/or mesenchymal support cells; [M3:2™]; [M3:5™]; [M3:10™]
Liver	Rat, mouse, hamster; Primary epithelial cells and/or mesenchymal support cells; [M3:2™]; [M3:5™]; [M3:10™]
Muscles (Peripheral; Heart; Smooth)	Rat, mouse, hamster, rabbit; Pericytes; Mesenchymal or Stromal Stem Cells; regenerative cells [M3:10™]
Pancreas; Other Neuroendocrine	Rat, mouse, hamster; pancreatic islet beta and acinar cells [M3:5™]; other organs (e.g., adrenal)
Peripheral or apheresis blood	Rat, mouse, hamster, rabbit; Circulating or mesenchymal cells; endothelial cells [M3:20™]
Skin (adult; newborn)	Epidermal keratinocytes co-cultures; Dermal Fibroblasts; Mesenchymal cells [M3:10™]; others
Tumors; various	Rat, mouse, hamster; epithelial, mesenchymal, lymphoid; [M3:10™]; etc.

Legend to Tables 2 and 3. Supplemented M3 media formulations may contain various percentages of FBS added to M3Base™. Those media are designated as M3:{% serum}. As an example, M3:10 contains 10% v/v FBS. Some media are kept in stock, while others are special manufactured or made by the customers by adding the FBS to the media.

Storage of M3:BaseA™ Media

M3:BaseA™ is refrigerated at 2°C to 8°C when not in use. Do not freeze. The shelf-life is 18 months from the manufacturing date.

Master Files Applications Note

The M3™ Family of media is in FDA Drug and Device Master Files but have not been tested by INCELL for any specific diagnostic or therapeutic use. To request use of a Master File call, FAX, or email to masterfiles@incell.com.

Ordering: Contact Charter Medical

Toll Free: 866.458.3116
incell@chartermedical.com
FAX: 336.714.4241

Technical Assistance

The scientists at INCELL are available to discuss the media or special needs of your cells, and to assist you in your cell culture applications. Call 1-800-364-1765 or e-mail info@incell.com.