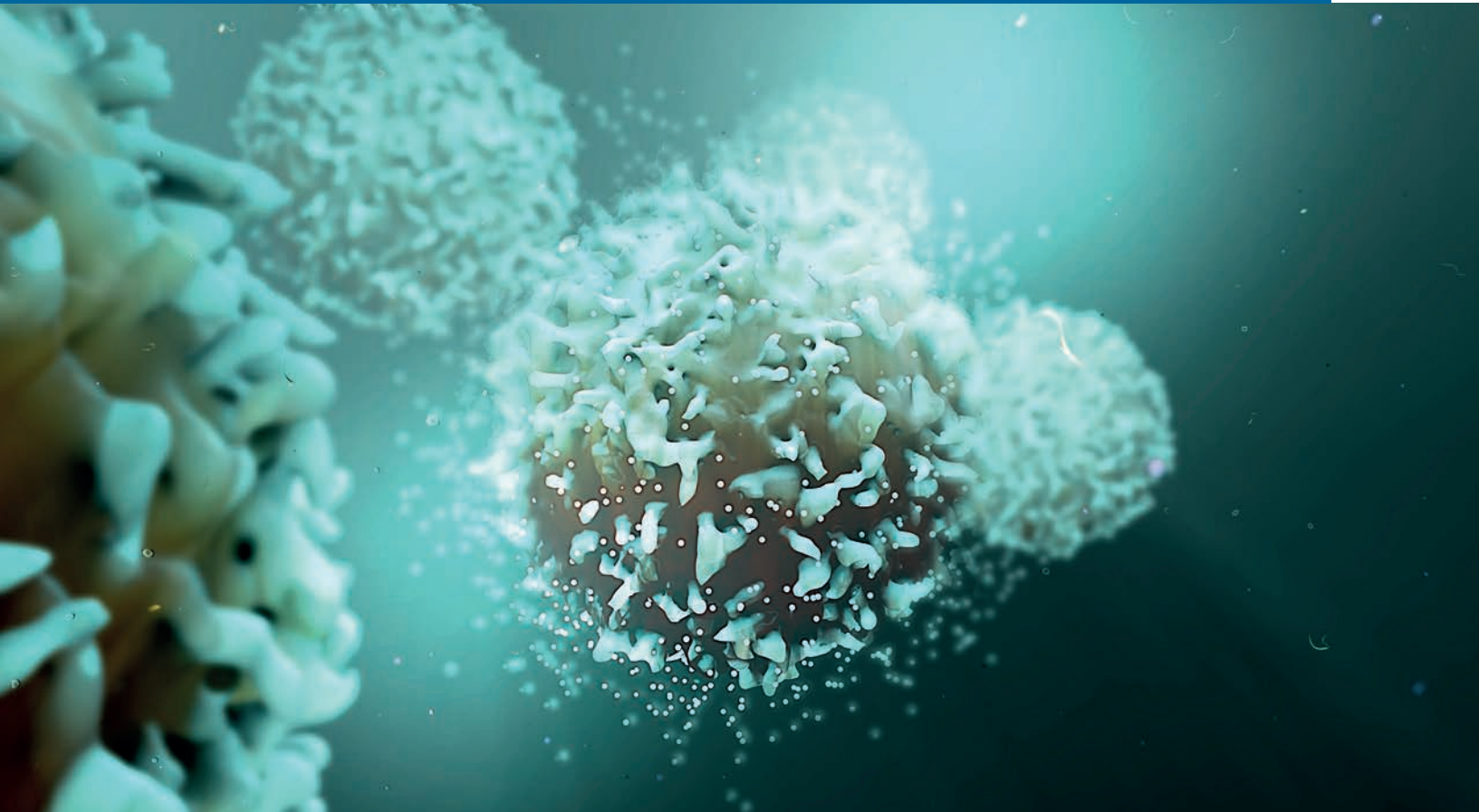


# CELL MEDIA SOLUTIONS



## PRODUCT GUIDE

---

*ADVANCED CELL CULTURE MEDIA SOLUTIONS FOR  
BIOPHARM, VACCINE AND CELL & GENE THERAPY PROCESSES.*



# CONTENTS

<b>3</b>	<b>OUR RANGE</b>
<b>4</b>	<b>TYPES OF MEDIA</b>
<b>5</b>	<b>STEM CELL MEDIA</b>
<b>6</b>	EXPANSION MEDIA
<b>6</b>	DIFFERENTIATION MEDIA
<b>7</b>	<b>IMMUNE CELL MEDIA</b>
<b>7</b>	T-CELL
<b>8</b>	NK CELL
<b>9</b>	<b>CRYOPRESERVATION MEDIA</b>
<b>9</b>	DMSO-FREE
<b>10</b>	DMSO-CONTAINING
<b>11</b>	<b>HEK293 SYSTEM</b>
<b>12</b>	<b>COMPLETE SOLUTIONS</b>

# OUR RANGE

Alongside our extensive portfolio of single-use cell therapy process solutions we have a range of **chemically defined T-Cell Media, DMSO-Free Cryopreservation Solutions, and Recombinant Growth Factors**. Offering advanced cell culture media solutions for stem and primary cells to support basic, translational, and clinical research, as well as commercial applications.



## STEM CELL MEDIA



## IMMUNE CELL MEDIA



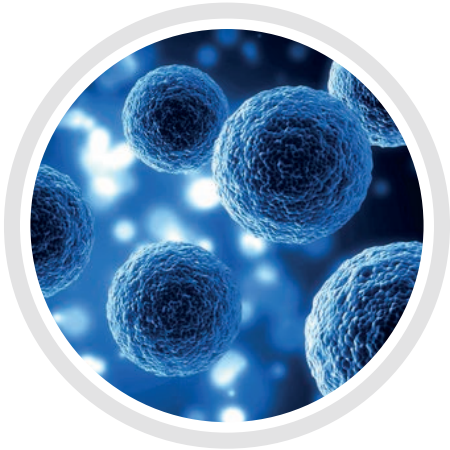
## CRYOPRESERVATION MEDIA

For a complete process solution, look no further, as we can provide a wide array of **Cell Therapy Solutions** that compliment the cell culture media solutions.



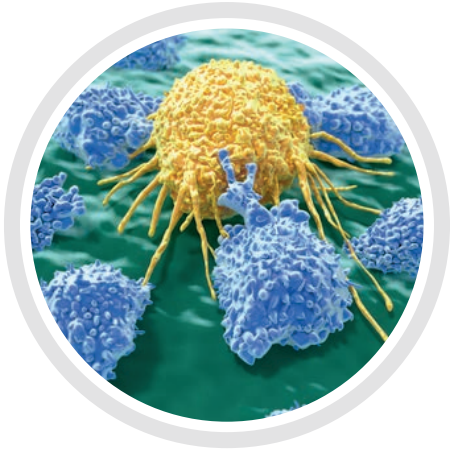
# TYPES OF MEDIA

## STEM CELL MEDIA




Serum-free Media & Reagents for Mesenchymal Stem Cells (MSCs) allow for maximal expansion or robust differentiation of mesenchymal stem cells and mesenchymal stromal cells derived from human bone marrow, adipose tissue, umbilical cord, and other cell sources in a serum-free cell culture system.

## IMMUNE CELL MEDIA



Serum-free Media & Reagents for Mesenchymal Stem Cells (MSCs) allow for maximal expansion or robust differentiation of mesenchymal stem cells and mesenchymal stromal cells derived from human bone marrow, adipose tissue, umbilical cord, and other cell sources in a serum-free cell culture system.

## CRYOPRESERVATION MEDIA



A collection of advanced cryopreservation solutions, including DMSO-free and DMSO-containing options, targeted to preserve cells without compromising functionality.

# STEM CELL MEDIA

Stem Cell Media is formulated to deliver **maximal expansion or optimal differentiation of MSCs.**

These **chemically-defined, serum-free** stem cell media formulations are aimed to minimise risk from adventitious agents and deliver lot-to-lot consistency in results. Making it ideally suited to support cell therapy applications at any stage, from research through to manufacturing.

AVAILABLE IN BOTH XENO-FREE OR SERUM-FREE FORMULAS

**Mesenchymal stem cells and stromal cells (MSCs)** are used in clinical trials due to their immune modulatory properties and multipotent differentiation potential to form cartilage, bone and other cell types.

However, because these stem cells and stromal cells exist in small populations, the ability to expand these progenitor cells in vitro is a limiting step in utilising MSCs for cell therapy applications.



# STEM CELL MEDIA

## EXPANSION MEDIA

Complete ready-to-use media formulated to deliver **maximal expansion of MSCs** from a variety of sources while maintaining functionality.

This expansion media is targeted to support optimal and reliable expansion of human MSCs while retaining morphology, marker expression, immunosuppressive function, and differentiation potential over multiple passages.

Type	Volume	Notes
PRIME-XV MSC Expansion XSFM	1 L 250 mL	Xeno-free, serum-free MSC expansion medium
PRIME-XV MSC Expansion SFM	1 L 250 mL	Serum-free MSC expansion medium

## DIFFERENTIATION MEDIA

Media specially formulated for the **robust differentiation of MSCs and amniotic fluid-derived stem cells (AFSCs)** into osteogenic, chondrogenic, or adipogenic cells.

This differentiation media offers the convenience of complete, ready-to-use, serum-free media formulated for optimal differentiation into bone, cartilage, and adipose cells.

Type	Volume	Notes
PRIME-XV Osteogenic Differentiation SFM	100 mL	Serum-free osteogenic differentiation medium
PRIME-XV Chondrogenic Differentiation XSFM	100 mL	Xeno-free, serum-free chondrogenic differentiation medium
PRIME-XV Adipogenic Differentiation SFM	100 mL	Serum-free adipogenic differentiation medium

# IMMUNE CELL MEDIA

## T-CELL

Chemically defined, animal component-free immune cell media for the **expansion and cultivation of T cells of human origin.**

The formulation is optimised to **deliver consistently vigorous growth** while **maintaining T cell functionality and potency.**

Offering the ability to scale-up to various automated bioreactors with increased speed for T cell culture, it is fully optimised for immune therapy and research.

The PRIME-XV T Cell CDM is a scalable formula for static and dynamic automation systems. Manufactured under cGMP regulations and designed for research use or further manufacturing applications.

- **Supports vigorous T cell growth in static and dynamic automation systems while maintaining functionality**
- **Provides lot-to-lot consistency for reliable formulation composition**
- **Eliminates the adverse effects undefined components cause on T cell phenotypes**
- **Supports polarization to targeted T cell types such as Th1 and T regulatory cells**

Type	Volume	Notes
PRIME-XV T Cell CDM	1 L	Chemically defined, animal component-free formula Does not contain antibiotics or phenol red.

# IMMUNE CELL MEDIA

## NK CELL

Chemically-defined animal component-free medium for the **ex vivo expansion of natural killer cells.**

Designed for use in NK and NKT cell-based immunotherapy research and translational applications, this advanced formulation **delivers growth while maintaining NK and NKT cell functionality and potency.**

Providing efficient *ex vivo* expansion of NK and NKT cells in a chemically-defined medium (CDM) designed to deliver **high lot-to-lot consistency.** The Animal component-free (ACF) formulation helps to minimise the risk from adventitious agents.

The PRIME-XV NK Cell CDM can facilitate a seamless transition from preclinical to clinical research. Manufactured under cGMP regulations, it is designed for research use or further manufacturing applications.

- Efficient *ex vivo* expansion of NK and NKT cells in a chemically-defined medium (CDM) designed to deliver high lot-to-lot consistency
- Animal component-free (ACF) formulation helps to minimize the risk from adventitious agents
- Formulated to support NK and NKT cells derived from peripheral blood mononuclear cells (PBMCs)

Type	Volume	Notes
PRIME-XV NK Cell CDM	1 L	Chemically defined, animal component-free



# CRYOPRESERVATION MEDIA

Cryopreservation media is a formula optimised to **protect and preserve cells during cryopreservation**, including MCSs, without compromising functionality.

By following a slow freezing process that minimises damage from cold shock, cryopreservation media enables cryopreservation of a variety of cell types, ranging from human mesenchymal stem cells and induced pluripotent stem cells to rat neural progenitor cells.

AVAILABLE IN DMSO-FREE AND DMSO-CONTAINING FORMULAS

## DMSO-FREE

For applications requiring a DMSO-free environment, DMSO-Free cryopreservation media is a solution devoid of DMSO. Recommended for human mesenchymal stem/stromal cells.

PRIME-XV Stem FreezIS DMSO-Free is a chemically defined, animal component and protein-free cryopreservation solution. The DMSO-free cryopreservation formula maintains potency of MSCs and HSCs and enables researchers to develop robust, reproducible protocols during the early stages of translational research and further manufacturing use.

- Comparable post-thaw cell viability as solutions containing dimethyl sulfoxide (DMSO)
- Maintain potency of stem cells throughout cryopreservation
- Eliminate risk of DMSO in MSC and HSPC applications
- Enables cell preservation at -80 C to -196 C environments

Type	Volume	Notes
PRIME-XV Stem FreezIS DMSO-Free	100 mL 10 mL	Protein-free, chemically-defined, animal component-free cryopreservation medium. Does not contain DMSO.

# CRYOPRESERVATION MEDIA

## DMSO-CONTAINING

Complete ready-to-use, animal component free, protein-free, chemically-defined cryopreservation solution containing 10% DMSO (dimethyl sulfoxide).

PRIME-XV FreezIS is recommended for the cryopreservation of most primary cells, including stem/progenitor cells, and other sensitive cell types. For research use or further manufacturing use.

- High post-thaw viability and growth
- Maintains cell surface marker expression of cells post-thaw
- Complete solution—no additional components are needed
- Enables cell preservation at -80 C to -196 C environments

Type	Volume	Notes
PRIME-XV FreezIS	100 mL 10 mL	Protein-free, chemically-defined, animal component-free cryopreservation medium

## A COMPLETE SOLUTION

Cryopreservation Bags allow for **durable, transparent, and flexible storage down to liquid nitrogen temperatures.** Designed with rounded inside corners to reduce the risk of ice points that may cause damage.

The unique bag design allows for **closed system processing.**



# HEK293 SYSTEM

**BalanCD HEK293** is a scalable system designed to support growth and transfection of HEK293 cell lines in suspension cultures. Comprised of BalanCD HEK293 medium, BalanCD HEK293 Feed and Anti-Clumping Supplement, this highly versatile system supports a range of applications including production of **viral vectors for gene therapy, transient protein expression, and recombinant protein production.**



BalanCD HEK293 is part of the scalable BalanCD media and supplements platform designed to provide the optimal balance between growth and production to maximize productivity from mammalian cell cultures.

- **Chemically-defined, animal component-free**
- **Rapid, scalable production of viral vectors and proteins for bioproduction**
- **Supports use for a wide range of HEK293 cell lines**
- **Increases productivity in transient protein expression**
- **For use in flasks, spinner flasks, and bioreactors**

Type	Volume	Notes
BalanCD HEK293, liquid	1 L	Chemically-defined, animal component-free formula
BalanCD HEK293, powder	10 L	Chemically-defined, animal component-free formula
BalanCD HEK293 Feed, liquid	500 mL	Chemically-defined, animal component-free formula
Anti-Clumping Supplement, liquid	50 mL	Animal component-free formula

# SOLUTIONS PROVIDED

Our collection of cell and gene therapy process solutions are suitable for, but are not limited to:

CELL DISCOVERY

CELL FILTRATION

CELL CULTURE & PROCESSING

CELL STORAGE & TRANSFER

CRYOPRESERVATION

FINAL FILL



We have curated our **extensive range of market-leading products** to provide a complete array of solutions to cell and gene therapy field.

Whether it's reliable supply of product or collaborating on a bespoke design, with a network of manufacturing partners, our team can offer the **very best in single-use cell therapy process solutions**, spanning from initial cell collection through to preparation for delivery.

# NOTES

A series of horizontal dotted lines for writing notes.



To further discuss the range of cell media solutions  
**Contact our sales team today.**



0161 705 4307  
[info@biopharmadynamics.com](mailto:info@biopharmadynamics.com)