ITS Animal-Free™

Recombinant Cell Culture Media Supplement (100 x) Animal-Origin-Free



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1. PRODUCT DESCRIPTION

ITS Animal-Free™ (ITS AF) is a chemically defined, animal-origin-free (AOF) 100x liquid basal media supplement, containing recombinant insulin (1.00 g/L), recombinant transferrin (0.55 g/L), and sodium selenite (0.00067 g/L) in Earle's Balanced Salt Solution. The 100x format allows for lower volume additions and easier handling compared to 5x or 10x alternatives.

ITS Animal-Free is designed to offer a defined alternative to fetal bovine serum (FBS) or traditional ITS (Insulin, Transferrin, Selenium) supplements in a broad range of cell types by supporting nutrient uptake, iron transport, and redox homeostasis. It offers a consistent, serum-free alternative to undefined serum and traditional ITS formulations, enabling greater reproducibility across research and manufacturing workflows.

This product is regulatory-friendly and eliminates risks associated with animal- or serum-derived components. Like all InVitria products, it is made in an ISO 9001–certified, cGMP-compliant U.S. facility that is certified animal-origin-free (AOF), with documented controls preventing the use or presence of animal-derived materials.

2. PRODUCT INFORMATION

GMP Part Number	**777ITS091**
Product Type	**Cell culture supplement**
Format	**Liquid**
Composition	**rh-Insulin – 1.00 g/L** **rh-Transferrin – 0.55 g/L** **Selenium – 0.00067 g/L**
Concentration	**100x**
Packaging	**10 mL, 100 mL, and 1 L bottles**
Sterility	**Sterile - filtered**
Endotoxin Level	**≤ 1.000 EU/mL**
Osmolality	**260 to 320 mOsm/kg**
pH	**7.70 - 8.70**
Source	**Recombinant**
Shelf Life	**3 years**
Storage	**2–8°C**
Manufacturing Site	• **Animal-origin-free facility** • **ISO 9001–certified** • **cGMP-compliant**

GUIDELINES FOR USE

3. APPLICATIONS

- Enables serum reduction or elimination in cell culture media
- Fully reconstituted 100x supplement simplifies workflows—no need to mix insulin, transferrin, and selenium individually
- Suitable for stem cell, fibroblast, primary cell, antibody (CHO/Hybridoma) workflo-ws
- Improves cell productivity, cell health, and cell growth in defined or xeno-free media
- Supports chemically defined, animal-origin-free, and regulatory-friendly bioprocessing

4. PREPARATION & USE

Format: This product is supplied as a sterile-filtered liquid 100x concentrate.

Mixing: Mix gently before use; avoid foaming.

DO NOT SHAKE OR VORTEX.

Recommended usage:

- For 1x final concentration: Add 10 mL of ITS AF to 990 mL of basal media.
- For 2x final concentration (for serum-free adaptation or demanding cell lines): Add 20 mL of ITS AF to 980 mL of basal media.
- **Optimization**: Adjust final concentration based on specific cell type, media formulation, and performance needs.

5. STORAGE & STABILITY

- **Shelf life:** Up to 3 years when unopened and stored at 2–8°C.
- **Diluted solutions:** (1×) should be stored at 2–8°C and used within 2 weeks.
- Keep tightly sealed to avoid contamination.
- **AVOID:**
  - Freezing
  - Prolonged exposure to temperatures >25°C
  - Direct sunlight or UV exposure
  - Vigorous agitation (shaking, vortexing, etc.)
  - Contact with oxidizing agents
  - Opening outside a sterile environment

6. REGULATORY NOTES

- Animal-origin-free (AOF)
- Chemically defined
- Manufactured in a cGMP-compliant, ISO 9001-
- certified facility
- Manufactured in the USA for reliable sourcing and regulatory alignment
- Ethically sourced & sustainable

7. ADDITIONAL RESOURCES

- Webpage - ITS Animal-Free
- Data Sheet - ITS Animal-Free
- SDS - ITS Animal-Free
- Guidelines for Use - ITS Animal-Free
- Application Note - Reducing Serum-Associated Contaminants from Growth Media in Primary Cell Culture
- Application Note - ITS-Animal-Free Supplementation for iPSC Expansion and Pluripotency: A Platform Approach for Serum-Free Cell Expansion

8. ORDERING INFORMATION

ITS Animal-Free	***Product #***
GMP-10 mL bottles	777ITS091-10mL
GMP-10 x 10 mL bottles	777ITS091-10mLx10
GMP-100 mL bottles	777ITS091-100mL
GMP-1 L bottles	777ITS091-1L

Performance. Defined.

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