

Datasheet**ITS solution I (100x)****Media Supplement**

Product	Description	Catalogue-No.	Size
ITS solution I	Solution 100x	P07-03100 P07-03110	5 ml 10 ml

Product description

Insulin-Transferrin-Selenium (ITS) supplementation of many conventional synthetic nutrient media permits substantial reduction in the Fetal Bovine Serum (FBS) requirement for routine maintenance and low density attachment of many adherent cell types.

ITS solution is intended for use as a supplement for basal media such as F-12 Nutrient Mixture, Dulbecco's Modified Eagle Medium/F12, DMEM and Eagle's Minimal Essential Medium. The supplement will promote optimal performance of serum-free media and reduce the need for serum. It enhances the growth of various adherent cell types at FBS concentrations less than 4 %.

Insulin promotes glucose and amino acid uptake, lipogenesis, monovalent cation and phosphate transport, protein and nucleic acid synthesis. Transferrin serves as a carrier for iron and may help to reduce toxic levels of oxygen radicals and peroxide. Selenite is a co-factor for glutathione peroxidase and is used as an antioxidant in media. Ethanolamine can serve as a precursor for the biosynthesis of phosphoglycerides, which are essential to the structure of the plasma membrane and cellular organelles.

Storage conditions

Storage: - 20 °C; once thawed, keep solution at 2-8 °C and avoid another freeze-thaw cycle

Stability: 2 years from date of production

Composition

ITS Solution I (100x), w: Insulin human rec., apo-Transferrin human, Sodium selenite

Suitability

ITS solution reduces the amount of serum needed in cell culture media.

Instructions for Use

10 ml of ITS solution (100x) is sufficient for up to one liter of medium. It is necessary to add 2-4% FBS to achieve optimal growth, although some adherent cultures may require less serum supplementation following initial adaptation.

Technical support

For technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (info@pan-biotech.com) or phone +49-8543-601630.

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