



# ITS-B Supplement 100X, Liquid

With 1 mg per ml Insulin, 0.55 mg per ml Human Transferrin, 0.5 µg per ml Sodium Selenite and 50 mg per ml Bovine serum albumin in Earle's Balanced Salt Solution Without Phenol red

**Product Code: TCL067** 

# **Product Description:**

ITS-B supplement is a basal growth factor supplement used to reduce the serum requirements in reduced serum and serum free cell culture systems.

Insulin is a peptide hormone responsible for uptake, utilization and storage of glucose by cells. Insulin is often used as a medium supplement for cell culture in the range of  $1-10 \mu g/ml$  depending upon the cell type.

Transferrin is a glycoprotein responsible for delivery of iron to cells. Most of the stimulatory activity of transferrin is attributed to its own iron binding properties. Transferrin has a stimulatory effect on many cell types and is used in cell culture at a concentration of 1-10  $\mu g/$  ml.

Selenium is an essential trace element required for normal cell growth and development.

Bovine serum albumin is a common supplement used in cell culture. It serves several functions such as a detoxifying agent, stabilizing buffer and as a transport protein. It is generally used in cell culture at a concentration of 0.1 to 1gm per litre.

## **Composition:**

Ingredients	mg/ml
Bovine serum albumin	50.0000
Human Transferrin	0.5500
Insulin	1.0000
Sodium selenite	0.0005

# **Quality Control:**

## **Appearance**

Pale yellow coloured, clear solution.

## pН

7.50 - 8.50

## Osmolality in mOsm/Kg H2O

280.00 - 320.00

#### Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

### **Cultural Response**

The growth promotion capacity of the solution is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts and comparing it with a control solution.

## **Endotoxin** content

NMT 5EU/ml

## **Storage and Shelf Life:**

Store the product at -20°C.

Note: Avoid repeated freeze thaw cycles. If required, once thawed make smaller aliquots and refreeze on the same day and then thaw just prior to use.

Shelf life of the product is 18 months.

Use before expiry date given on the product label.

Revision: 1 / 2012

## **Directions:**

Recommended Usage: 10 ml per litre of medium

#### Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia<sup>TM</sup> Publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia<sup>TM</sup> Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.