Product sheet

Insulin-Transferrin-Selenium (ITS), Solution 100x | 831 104

Product Overview

Volume: 10 ml Storage: +2°C to +8°C Sterility: Sterile-filtered

Insulin-Transferrin-Selenium (ITS) Solution (100x) is a chemically defined supplement designed for a wide range of cell culture applications. It is most commonly used as an additive to basal cell culture media to support cell growth under reduced-serum or serum-free conditions.

Application and Benefits

Our ITS supplement provides essential components required for the optimal performance of serum-free media. By supplementing conventional nutrient media with ITS, the fetal bovine serum (FBS) requirement for the routine maintenance of many cell lines can be significantly reduced. This helps minimize variability associated with serum use while maintaining consistent cell growth and viability.

Insulin supports cellular uptake and metabolism of key nutrients, transferrin facilitates iron transport, and selenium contributes to antioxidant defense and enzymatic activity. Together, these components promote balanced cell metabolism and improved reproducibility in defined culture systems.

Formulation and Usage

Insulin-Transferrin-Selenium (ITS) is supplied as a 100x concentrated solution in Earle's Balanced Salt Solution (EBSS) without phenol red. For standard applications, dilute 1:100 into the appropriate basal medium to achieve the recommended working concentration. Store at +2°C to +8°C and handle under aseptic conditions to maintain product stability and sterility.

For research use only. Not for use in diagnostic or therapeutic procedures. Not for use in humans or animals.