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Certificate of Analysis and Data Sheet

Recombinant Human Insulin, Yeast-expressed

Catalog No. 228-10966

Source

Saccharomyces cerevisiae

Introduction

Insulin decreases blood glucose concentration. It increases cell permeability to monosaccharides, amino acids and fatty acids. It accelerates glycolysis, the pentose phosphate cycle, and glycogen synthesis in liver.

Description

Insulin Human Recombinant produced in Yeast is a two chain, glycosylated polypeptide chain containing 51 amino acids and having a molecular mass of 5807 Dalton. Zinc content was found to be 0.4%. Insulin is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized from 50mM Sodium Chloride solution.

Solubility

It is recommended to reconstitute the lyophilized Insulin in PBS pH-7.5.

Stability

Lyophilized Insulin should be stored at 4°C. Upon reconstitution Insulin should be stored at -20°C to -80°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). **Please prevent freeze-thaw cycles.**

Purity

Greater than 98.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Biological Activity

27 units/mg.

Insulin has been evaluated in cell culture (Human Foreskin Fibroblasts).

The effective concentration range for use in defined media is 1-5ug/ml. However, the optimum concentration range for a particular application must be determined by the investigator.