



Insulin, Recombinant Human

Cat. No. 91077C

Description

Insulin, Recombinant Human is a genetically engineered full sequence molecule produced by recombinant DNA technology in baker's yeast *Saccharomyces cerevisiae*. Identical in structure and function to the native human sequence, recombinant insulin is used as a supplement for cultures of mammalian cell lines.

Precautions

This product is for further manufacturing use.
THIS PRODUCT IS NOT INTENDED FOR HUMAN OR THERAPEUTIC USE.

Storage

Insulin, Recombinant Human in the powder form should be stored at -10 to -40 C. Liquid solutions, prepared as described below, should be stored at 2 to 8 C and should not be frozen.

Preparation Instructions

1. Use cell culture grade water (Catalog No. 59900C) to dissolve product.
2. Adjust the pH to 2.0 - 3.0 with dilute HCl (0.1 or 0.01N, depending on the volume of the insulin solution). The solution should become clearer as you pass through the isoelectric point (pH 5,3) of the product.
3. This product is also soluble at a basic pH, and similar reactions occur around the isoelectric point of the product as mentioned previously.
4. The solution should be sterile filtered using a low proteinbinding filter with a pore size of 0.2 µm. Aeration and foaming should be avoided during solubilization and filtration as this can lead to protein denaturation.

Methods for Use

The recommended concentration of Insulin, Recombinant Human is 1 - 10 µg/mL. Do not prepare concentrated insulin solutions as they can be difficult to solubilize.

Characteristics

Appearance

White crystalline powder

Activity

> 27.5 IU/mg (d.b.)

Endotoxin

≤ 1.0 EU/mL

Solubility

Soluble at 10 mg/mL in pH 2.0 - 2.5

Loss on drying

≤ 10.0%

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