

Recombinant Human Insulin (Cell Culture Grade)

Cat #: A-CSH001

Size: 25mg, 100mg

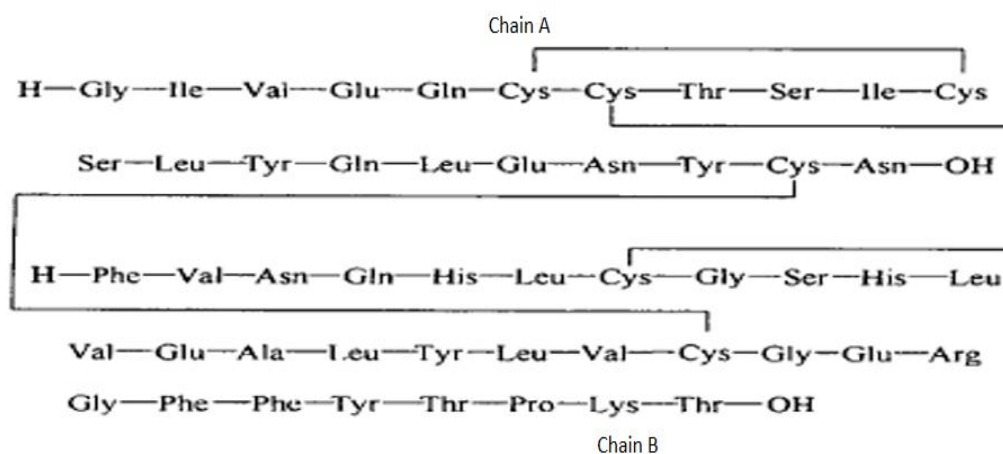
Storage: -20°C (36 months)

Product Description

Product Name	Recombinant Human Insulin (Cell Culture Grade)
Cat #	A-CSH001
CAS Number	11061-68-0
Molecular Formula	$C_{257}H_{383}N_{65}O_{77}S_6$
Molecular Weight	5808
Appearance	White powder
Activity	≥ 15 U/mg
Purity	95.0~105.0 %
Bacterial Endotoxin	< 0.01 EU/ μ g
Residual Host Cell Protein	< 10 ng/mg

Insulin is a peptide hormone secreted by the pancreatic β cells. It plays a crucial role in various cellular activities, such as promoting the transport of glucose and amino acids, enhancing synthetic metabolism while reducing breakdown metabolism, and stimulating cell growth, among others. Insulin is a commonly added substance in serum-free mammalian cell culture media.

Recombinant human insulin is a peptide composed of 51 amino acid residues, produced using recombinant technology. It is a white or off-white crystalline powder that is practically insoluble in water, ethanol, and ether, but readily soluble in dilute hydrochloric acid and dilute sodium hydroxide solution.



Usage

The concentration of insulin in serum-free culture media is generally in the range of 5-20 mg/L. The most appropriate concentration should be selected depending on the specific cell line.

Recombinant human insulin is supplied in powder form and should be stored at temperatures below -18°C. Prior to use, it should be dissolved in hydrochloric acid solution (10 mM) to prepare a stock solution containing 1-2 mg of insulin per 1 ml. The solution should then be sterilized by filtration, and the filtered solution can be stored at -20°C for up to 6 months. Avoid repeated freeze-thaw cycles.

Disclaimer

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.