



## Recombinant Human Insulin Protein

### Product Data Sheet

<b>Cat. No.:</b>	A32700025	A32700250	A32701000
	25 mg	250 mg	1 g

#### Description

*Recombinant Human Insulin Protein*, produced in *E. coli*, is a two chain, non-glycosylated polypeptide hormone containing 51 amino acids and has a molecular mass of 5807 Dalton. Insulin is purified by proprietary chromatographic techniques.

#### Summary

Insulin is a peptide hormone produced by beta cells of the pancreatic islets encoded in humans by the INS gene. 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 ([UniProtKb\\_P01308](#)). Recombinant Human Insulin is a commonly used media supplement in mammalian cell culture.

#### CAS Registry No.

11061-68-0

#### Purity

Purity greater than 98.0% as determined by RP-HPLC analysis.

#### Biological Activity

The biological activity was determined to be 28 units/mg.

#### Formulation

Sterile-filtered white lyophilized (freeze-dried) powder. The protein was lyophilized from a concentrated (1 mg/ml) solution with no additives.

#### Reconstitution

It is recommended to reconstitute the lyophilized Insulin in sterile 0.005N HCl not more than 1 mg/ml.

update.: 032023

#### Ilex Life Sciences LLC

1465 Sand Hill Rd, Suite 2018, Candler, NC 28715

Tel: 828-531-9949; Email: [info@ilexlife.com](mailto:info@ilexlife.com)

Web: <https://ilexlife.com/>



### **Shipping**

Ships at ambient temperature. Upon receipt, store the product at the temperature recommended below.

### **Storage**

Lyophilized Insulin, although stable at room temperature for 3 weeks, should be stored desiccated below  $-18^{\circ}$  C. Upon reconstitution, Insulin should be stored at  $4^{\circ}$  C between 2-7 days and for future use below  $-18^{\circ}$  C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). **Please prevent freeze-thaw cycles.**

### **Usage**

This product is intended for **Laboratory Research Use Only**. Not for use in diagnostic or therapeutic procedures. This product may not be used as a pharmaceutical or veterinary drug, agricultural product, or food additive.

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