

Glucagon Human

Description: Glucagon Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 29 amino acids and having a molecular mass of 3483 Dalton. The Glucagon is purified by proprietary chromatographic techniques.

Synonyms: GLP1, GLP2, GRPP.

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Amino Acid Sequence: The sequence of the first five N-terminal amino acids was determined and was found to be His-Ser-Gln-Gly-Thr.

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

Formulation:

Each mg of recombinant Glucagon was formulated with 100mg of lactose.

Stability:

Lyophilized Glucagon although stable at room temperature for 3 weeks, should be stored at 40C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Usage:

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

Solubility:

It is recommended to reconstitute the lyophilized Glucagon sterile 18M-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Introduction:

Glucagon is an important hormone involved in carbohydrate metabolism. The hormone is synthesized and secreted from alpha cells (-cells) of the islets of Langerhans, which are located in the endocrine portion of the pancreas. Glucagon is released when the glucose level in the blood is low (hypoglycemia), causing the liver to convert stored glycogen into glucose and release it into the bloodstream. The action of glucagon is thus opposite to that of insulin, which instructs the body's cells to take in glucose from the blood in times of satiation. Glucagon is beneficial for the culture of some cell types. It has been used in some biochemical regulation studies of glycogenolysis in hepatocytes. It has been also been found to induce DNA replication in primary cultures of adult rat hepatocytes when used in combinations with EGF and Insulin. Glucagon increases the blood glucose concentration by promoting rapid breakdown of liver glycogen, and also acts to relax smooth muscle such as the gastrointestinal tract.

Biological Activity:

The activity is determined by comparing, under certain conditions, the hyperglycemic effect it produces with that produced by the international standard or by reference preparation calibrated in IU and is found to be 1 IU/mg.

Catalog #:HOPS-244

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