

**Product:** Glucagon Like Peptide-1 (GLP-1), human, recombinant  
**Catalog #:** 12-4244  
**Amount:** 10 µg

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**DESCRIPTION:**

Recombinant human Glucagon Like Peptide-1 (rHuGLP-1)  
rHuGLP-1 is a single, non-glycosylated, polypeptide chain containing 30 amino acids and having a molecular mass of 3298.7Dalton.  
GLP-1 is an incretion hormone, which has been shown to stimulate secretion of insulin in the presence of elevated blood glucose concentrations, but not during periods of low blood glucose concentrations (hypoglycemia).  
GLP-1 is released from gut endocrine cells in response to nutrient ingestion. The hormone is a physiologic mediator of satiety and regulates energy absorption and disposal.  
GLP-1 is an insulinotropic hormone that has the ability to render pancreatic beta cells glucose-competent. It has been used in the therapy of type-2 diabetes.  
GLP-1 has activities of cytokines, although it is not classified as such due its small size GLP-1 enhances cell differentiation, plays a role in tissue regeneration, and mediates cytoprotection.  
The sequence of the first five N-terminal amino acids was determined and was found to be His-Ala-Glu-Gly-Thr.

**SOURCE:**

*Escherichia coli*

**PURITY:**

> 98%, as determined by:  
(a) Analysis by RP-HPLC and Anion-exchange FPLC.  
(b) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

**ENDOTOXIN:**

< 0.1 ng/µg (IEU/µg) of rHuGlucagon

**DIMERS & AGGREGATES:**

< 1% as determined by silver stained SDS-PAGE gel analysis

**PROTEIN CONTENT:**

Protein quantitation was carried out by 2 independent methods:  
- UV spectroscopy at 280 nm  
- Analysis by RP-HPLC, using a standard solution of rHuGlucagon as a Reference Standard

**FORM:**

Purified, in 49mgs of lactose, containing 0.1 % BSA

**STORAGE:**

-20°C (aliquot), avoid freezing and thawing cycles

**BIOLOGICAL ACTIVITY:**

- Regulates Glucose levels rapidly
- Reduces Insulin resistance
- Reduces Glucagon
- Reduces HbA1c
- Stimulates beta cell growth which stimulates insulin production

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