

## GCG

### Recombinant Human Glucagon-like Peptide 1/GLP-1 (31 a.a.)

<b>Catalog No.</b>	CRG509A	<b>Quantity:</b>	10 µg
	CRG509B		50 µg
	CRG509C		1.0 mg

**Alternate Names:** Glucagon-like peptide 1, GLP-1, Incretin hormone

**Description:** Endogenous GLP-1 is derived from proglucagon (78-107) which is then cleaved by endopeptidase to the biologically active GLP-1 (7-37). In humans >80% of the secreted GLP-1 has the C-terminal glycine amidated resulting in also active GLP-1 (7-36)NH<sub>2</sub>. GLP-1 secretion by L cells is dependent on the presence of nutrients in the lumen of the small intestine. The secretagogues (agents that causes or stimulates secretion) of this hormone include major nutrients like carbohydrate, protein and lipid. Once in the circulation, GLP-1 has a half life of less than 2 minutes, due to rapid degradation by the enzyme dipeptidyl peptidase-4. GLP-1 possesses several physiological properties that make it a subject of intensive investigation as a potential treatment of diabetes mellitus. The known physiological functions of GLP-1 include: Increases insulin secretion from the pancreas in a glucose-dependent manner, decreases glucagon secretion from the pancreas, increases beta cells mass and insulin gene expression, inhibits acid secretion and gastric emptying in the stomach, decreases food intake by increasing satiety. Also stimulates insulin release in response to IL6.

**UniProt ID:** P01275

**Source:** *E. coli*

**Molecular Weight:** 3298.7 Da (aa 7-37) monomer

**Formulation:** Lyophilized after extensive dialyses against 0.1 mg sodium phosphate monobasic and 1.6 mg sodium phosphate dibasic.

**Purity:** > 95% by RP-HPLC and SDS-PAGE analyses.

**Amino Acid Sequence:** HAEGTFTSDV SSYLEGQAAK EFLAWLVKGR G

**Reconstitution:** **Centrifuge vial prior to opening.** Reconstitute with sterile deionized water at >100 µg/ml, which can then be further diluted to other aqueous solutions.

**Storage & Stability:** Upon receipt, store at -20°C to -80°C for up to 1 year. Reconstituted protein should be aliquoted and stored at -20°C to -80°C with a carrier protein (0.1% HSA or BSA) as a stabilizer. **Avoid repeated freeze-thaw cycles.**

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