

# Recombinant Exendin-4

---

Expressed in *E. coli*  
Cat. No. CRP08122  
Lot. No. (See product label)

## PRODUCT INFORMATION

---

**Description:** Exendin-4 is a novel 39-amino acid peptide isolated from the venom of the Gila monster *Heloderma suspectum*. It shares 53% sequence homology with GLP-17-36amide and interacts with the same membrane receptor. Exendin-4 enhances glucose-dependent insulin secretion, suppresses inappropriately elevated glucagon secretion, and slows gastric emptying in vivo. It also promotes  $\beta$ -cell proliferation and neogenesis in vitro and in animal models. Recombinant Exendin-4 is *E. coli* expression of a synthetic DNA sequence encoding the 39 amino acid of Exendin-4.

**M. W. :** approximately 4.1 kDa

**Amino-Acid Sequence:** 39aa. non-glycosylated

**CAS Number:** 141758-74-9

**Molecular Formula:** C184H282N50O60S

**Purity:** >96% by SDS-PAGE and HPLC analyses.

**Recombinant:** Expressed in *E. coli*

**Specific Activity:** Sterile Filtered White Lyophilized (freeze-dried) powder.

**Endotoxin:** Less than 10EU/mg of rExendin-4 as determined by LAL method.

**Formulation:** Lyophilized from a 0.2mm filtered solution of 20mM PBS, pH 7.0, containing 4% mannitol.

**Reconstitution:** We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at  $\leq -20^{\circ}\text{C}$ . Further dilutions should be made in appropriate buffered solutions.

**Storage:** This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C. Avoid repeated freeze/thaw cycles.

## REFERENCES

---

1. Eng, J., et al., Isolation and characterization of exendin-4 an exendin-3 analogue from *Heloderma suspectum* venom. *J. Biol. Chem.* 267, 7402, (1992)
2. Montrose-Rafizadeh, C., et al., High potency antagonists of the pancreatic glucagon-like peptide-1 receptor. *J. Biol. Chem.* 272, 21201-21206, (1997)
3. Beak, S.A., et al., Glucagon-like peptide-1 stimulates luteinizing hormone-releasing hormone secretion in a rodent hypothalamic neuronal cell line. *J. Clin. Invest.* 101, 1334-1341, (1998)

**FOR RESEARCH USE ONLY**

---

Creative Biolabs All rights reserved.

45-16 Ramsey Road Shirley, NY 11967, USA  
Technical Support: T: 631-871-5806 · F: 631-207-8356  
E-mail: [info@creative-biolabs.com](mailto:info@creative-biolabs.com)  
[www.creative-biolabs.com](http://www.creative-biolabs.com)