

Recombinant Exendin-4

#R00585

Size: 100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.

- 1 month, 2 to 8 °C under sterile conditions after reconstitution.

- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

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 β -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.

AA Sequence

HGEGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAP
PPS

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 ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	Exenatide
Accession	P26349
Source	<i>Escherichia coli</i> .
Molecular Weight	Approximately 4.2 kDa, a single non-glycosylated polypeptide chain containing 39 amino acids.
Purity	> 96 % by SDS-PAGE and HPLC analyses.
Biological Activity	1. Regulates Glucose levels rapidly; 2. Reduces Insulin resistance; 3. Reduces Glucagon; 4. Reduces HbA1c; 5. Stimulates beta cell growth which stimulates insulin production.
Physical Appearance	Sterile Filtered White Lyophilized (freeze-dried) powder.

Formulation	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.
Endotoxin	Less than 10 EU/mg of rExendin-4 as determined by LAL method.
