

Recombinant Exendin-4

Information

Gene ID	
Accession #	P26349
Alternate Names	Exenatide
Source	Escherichia coli.
M.Wt	Approximately 4.2 kDa, a single non-glycosylated polypeptide chain containing 39 amino acids.
AA Sequence	HGEGTFTSDL SKQMEEEAVR LFIEWLKNNGG PSSGAPPPS
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
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
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.
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.
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.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	100µg	500µg
Recombinant Exendin-4	100µg	500µg

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

Quality Control

Purity	> 96 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 10 EU/mg of rExendin-4 as determined by LAL method.

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 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.

Reference

1. Malhotra R, Singh L, Eng J, et al. 1992. Regul Pept, 41: 149-56
2. Neidigh JW, Fesinmeyer RM, Prickett KS, et al. 2001. Biochemistry, 40: 13188-200
3. Movassat J, Beattie GM, Lopez AD, et al. 2002. J Clin Endocrinol Metab, 87: 4775-81
4. Alarcon C, Wicksteed B, Rhodes CJ. 2006. Diabetologia, 49: 2920-9.

APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com