

Exendin-4

Catalog # PVGS1114

Specification

Exendin-4 - Product Information

Primary Accession
Species
Gila monster

P26349

Sequence

His48-Ser86

Purity

> 96% as analyzed by SDS-PAGE
br>> 96% as analyzed by HPLC

Endotoxin Level

< 0.2 EU/ µg of protein by LAL method

Expression System

E. coli

Theoretical Molecular Weight

4.2 kDa

Formulation

Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Exendin-4 - Additional Information

Other Names

Exendin-4, Exenatide, EXE4

Target 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 ß-cell proliferation and neogenesis in vitro and in animal models.



Exendin-4 - Protein Information

Name EXE4

Function

Venom protein that mimics the incretin hormone glucagon-like peptide 1 (GLP-1). It stimulates insulin synthesis and secretion, protects against beta-cell apoptosis in response to different insults, and promotes beta-cell proliferation. It also promotes satiety, reduces food intake, reduces fat deposition, reduces body weight and inhibits gastric emptying. Interacts with GLP-1 receptor (GLP1R). Induces hypotension that is mediated by relaxation of cardiac smooth muscle.

Cellular Location Secreted.

Tissue Location Expressed by the venom gland.

Exendin-4 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Exendin-4 - Images