

DATASHEET

Version 20181206

Exendin-4**Cat. No.:** Z02811-1**Size:** 1.0 mg**Synonyms:** Exendin-4 ;**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.

Amino Acid Sequence:

00001 HGGTFTSDL SKQMEEEAVR LFIEWLKNKG PSSGAPPPS

Source: *E. coli***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.

Molecular Weight: Approximately 4.2 kDa, a single non-glycosylated polypeptide chain containing 39 amino acids.**Formulation:** Lyophilized from a 0.2 μ m filtered solution in PBS, pH 7.4.**Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.**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 $< -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.**Purity:** $>96\%$ by SDS-PAGE and HPLC analyses.**Endotoxin Level:** Less than 0.2EU/ μ g of rExendin-4 as determined by LAL method.**Storage:** This lyophilized preparation is stable at $2-8^{\circ}\text{C}$, 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 $2-8^{\circ}\text{C}$. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C . Avoid repeated freeze/thaw cycles.