

## 32-2021: Exendin 4 Recombinant Protein

**Alternative Name :** Exenatide.

### Description

Source : Escherichia Coli. Exendin-4 Recombinant is a novel 39-amino acids peptide having a molecular mass of 4186.7 Dalton, which shares 53% sequence homology with GLP-17-36 amide and interacts with the same membrane receptor. The Exendin-4 is purified by proprietary chromatographic techniques. Exedin-4 Recombinant is a glucagon like peptide-1 receptor agonist. The native hormone is produced in the gut of Gila monster Heloderma suspectum (a type of reptile found in the desert) that stimulates insulin production without causing threateningly low blood sugar, which can occur after using insulin and some anti-diabetes products. Recently, researchers used extracted saliva from gila monsters to create an unprecedented breakthrough in Diabetes Type 2 treatment. Unlike other products taken for type 2 diabetes, Exedin-4 has not been linked with weight gain and actually resulted in weight loss, according to the researchers. Exedin-4 enhances glucose-dependant insulin secretion, suppresses inappropriately elevated glucagon secretion and slows gastric emptying in vivo. It also promotes B-cell proliferation and neogenesis in vitro and in animal models. Exedin-4 stimulates an increase in acinar cAMP, without stimulating the release of amylase.

### Product Info

<b>Amount :</b>	100 µg
<b>Purification :</b>	Greater than 95.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Content :</b>	The Exendin-4 peptide was lyophilized after extensive dialyses against 20mM PBS and contains 4% mannitol.
<b>Storage condition :</b>	Lyophilized Exendin Recombinant although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Exendin-4 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.
<b>Amino Acid :</b>	The sequence determined and was found to be His-Gly-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Leu-Ser-Lys-Gln-Met-Glu-Glu-Glu-Ala-Val-Arg-Leu-Phe-Ile-Glu-Trp-Leu-Lys-Asn-Gly-Gly-Pro-Ser-Ser-Gly-Ala-Pro-Pro-Ser.

### Application Note

It is recommended to reconstitute the lyophilized Exendin Recombinant in sterile 18MΩ $\cdot$ cm H<sub>2</sub>O not less than 100 Å $\cdot$ µg/ml, which can then be further diluted to other aqueous solutions. 1. Regulates Glucose levels rapidly2. Reduces Insulin resistance 3. Reduces Glucagon4. Reduces HbA1c5. Stimulates beta cell growth which stimulates insulin production.