

□ Cat # RP-601

Recombinant Exendin-4

Size: □ 20 ug

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.

**Synonyms:**

Exenatide.

**Description:**

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.

**Amino acid sequence:**

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.

Recombinant Exendin-4 was expressed in *Escherichia Coli* purified (.95%). It is supplied as in solution in PBS, pH 7.4, 4% mannitol (or see lot sp. conc on the vial) or lyophilized (freeze-dried) in the same buffer. It is recommended to reconstitute the lyophilized Exendin in distilled water at no less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

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). Avoid prevent freeze-thaw cycles.

**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

This item is for LABORATORY RESEARCH USE ONLY.

**Related items**

Catalog# ProdDescription

PP-1250 Exenatide Acetate (Exendin-4)

RP-601 Recombinant Exendin-4

SP-100297-5 Exendin 4 (1-8) (AA: His-Gly-Glu-Gly-Thr-Phe-Thr-Ser-NH2) (MW: 833.86)

SP-100814-1 Biotin - Exendin 4 (AA: Biotin-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-NH2) (MW: 4412.96)

SP-101099-1 Exendin 4 (3-39) (AA: 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-NH2) (MW: 3991.5)

SP-52143-1 Exendin-4 [H-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-NH2; MW: 4186.03]

SP-55285-1 Exendin (9-39) [H-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-NH2; MW: 3369.83]

SP-87196-1 Exendin 4 (3-39) (AA: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-NH2) (MW: 3992.47)

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