

# PRODUCT INFORMATION



## Exendin-4 (5-39) amide (trifluoroacetate salt)

Item No. 35847

**MF:**  $C_{169}H_{262}N_{44}O_{54}S \cdot XCF_3COOH$

**FW:** 3,806.2

**Purity:**  $\geq 95\%$

**Supplied as:** A solid

**Storage:**  $-20^{\circ}C$

**Stability:**  $\geq 4$  years

H—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—Pro—Ser—NH<sub>2</sub>

•  $XCF_3COOH$

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Exendin-4 (5-39) amide (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the exendin-4 (5-39) amide (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

### Description

Exendin-4 (5-39) amide is a 34-amino acid synthetic peptide corresponding to residues 5-39 of exendin-4 (48-86) amide (Item No. 11096) and an antagonist of the glucagon-like peptide 1 (GLP-1) receptor ( $IC_{50} = 0.3$  nM) that has roles in synaptic transmission.<sup>1</sup> It decreases GLP-1-induced increases in intracellular cAMP levels in CHO/pancGLPR cells. Exendin-4 (5-39) amide (10 and 100 nM) increases extracellular glutamate reuptake in primary rat hippocampal astrocytes.<sup>2</sup> *In vivo*, exendin-4 (5-39) amide increases excitatory amino acid transporter 2 (EAAT2) protein levels and decreases the field excitatory postsynaptic potential decay time in the rat dentate gyrus when administered intracerebroventricularly.

### References

1. Montrose-Rafizadeh, C., Yang, H., Rodgers, B.D., *et al.* High potency antagonists of the pancreatic glucagon-like peptide-1 receptor. *J. Biol. Chem.* **272**(34), 21201-21206 (1997).
2. Kobayashi, K., Iwai, T., Sasaki-Hamada, S., *et al.* Exendin (5-39), an antagonist of GLP-1 receptor, modulates synaptic transmission via glutamate uptake in the dentate gyrus. *Brain Res.* **1505**, 1-10 (2013).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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