PRODUCT INFORMATION



Ecnoglutide

Item No. 41272

CAS Registry No.: 2459531-73-6

Formal Name: L-histidyl-L-valyl-L-α-glutamylglycyl-L-threonyl-

> L-phenylalanyl-L-threonyl-L-seryl-L-α-aspartyl-L-valyl-L-seryl-L-tyrosyl-L-leucyl-L-αglutamyl-L-α-glutamyl-L-glutaminyl-L-alanyl-Lalanyl-L-arginyl-L-α-glutamyl-L-phenylalanyl-L-

isoleucyl-N6-[N-(17-carboxy-1-oxoheptadecyl)-L-γ-glutamyl-2-[2-(2-aminoethoxy)ethoxy]

acetyl-2-[2-(2-aminoethoxy)ethoxy]

acetyl]-L-lysyl-L-tryptophyl-L-leucyl-L-valyl-L-

arginylglycyl-L-arginyl-glycine

XW003 Synonym:

Peptide Sequence: HVEGTFTSDVSSYLEEQAAREFIK-(AEEA-AEEA-{γ-Glu}-C18 diacid)-WLVRGRG

(AEEA = 2-(2-(2-aminoethoxy)ethoxy)acetic acid)

MF: $C_{194}H_{304}N_{48}O_{61}$

FW: 4,284.8

≥98% **Purity:** Supplied as: A solid -20°C Storage: Stability: ≥4 years

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

Laboratory Procedures

Ecnoglutide is supplied as a solid. A stock solution may be made by dissolving the ecnoglutide in the solvent of choice, which should be purged with an inert gas. Ecnoglutide is sparingly soluble (1-10 mg/ml) in DMSO.

Description

Ecnoglutide is a cAMP-biased peptide glucagon-like peptide 1 receptor (GLP-1R) agonist. It selectively induces cAMP accumulation over β -arrestin recruitment (EC₅₀s = 0.018 and 1,300 nM, respectively) without inducing GLP-1R receptor internalization (EC $_{50}$ = >10,000 nM) in cell-based assays using human GLP-1R. In vivo, ecnoglutide (0.15 mg/kg) reduces fasting and post-prandial blood glucose levels in db/db mice. It also reduces body weight and food intake in db/db mice when administered at a dose of 0.05 mg/kg.

Reference

1. Guo, W., Xu, Z., Zou, H., et al. Discovery of ecnoglutide — A novel, long-acting, cAMP-biased glucagon-like peptide-1 (GLP-1) analog. Mol. Metab. 75:101762, (2023).

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

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

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information Buyer agrees to purchase the material can be found on our website.

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