

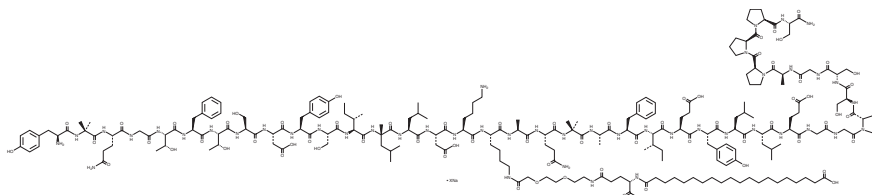
PRODUCT INFORMATION



Retatrutide (sodium salt)

Item No. 39747

Formal Name: L-tyrosyl-2-methylalanyl-L-glutaminyglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- α -aspartyl-L-tyrosyl-L-seryl-L-isoleucyl-2-methyl-L-leucyl-L-leucyl-L- α -aspartyl-L-lysyl-N⁶-[N-(19-carboxy-1-oxonadecyl)-L- γ -glutamyl-2-[2-(2-aminoethoxy)ethoxy]acetyl]-L-lysyl-L-alanyl-L-glutaminy-2-methylalanyl-L-alanyl-L-phenylalanyl-L-isoleucyl-L- α -glutamyl-L-tyrosyl-L-leucyl-L-leucyl-L- α -glutamylglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-alanyl-L-prolyl-L-prolyl-L-prolyl-L-serinamide, sodium salt



Synonym: LY3437943
MF: C₂₂₁H₃₄₂N₄₆O₆₈ • XNa
FW: 4,731.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years

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

Laboratory Procedures

Retatrutide (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the retatrutide (sodium salt) in the solvent of choice, which should be purged with an inert gas. Retatrutide (sodium salt) is slightly soluble in acetonitrile.

Retatrutide (sodium salt) is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Retatrutide is a triple agonist of the glucagon receptor (GCGR), glucagon-like peptide 1 receptor (GLP-1R), and gastric inhibitory polypeptide receptor (GIP receptor), also known as the glucose-dependent insulinotropic polypeptide receptor.¹ It induces cAMP accumulation in HEK293 cells expressing the human GCGR, GLP-1R, or GIP receptor (EC₅₀s = 5.79, 0.775, and 0.0643 nM, respectively). Retatrutide (0.1-30 nmol/kg) decreases plasma glucose levels in an intraperitoneal glucose tolerance test in mice. It decreases body weight, calorie intake, fat mass, and lean mass in a mouse model of diet-induced obesity in a dose-dependent manner. Acute administration of retatrutide (10 nmol/kg) delays gastric emptying and chronic administration for 10 days decreases food intake and body weight in mice.²

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

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

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References

1. Coskun, T., Urva, S., Roell, W.C., *et al.* LY3437943, a novel triple glucagon, GIP, and GLP-1 receptor agonist for glycemic control and weight loss: From discovery to clinical proof of concept. *Cell Metab.* **34(9)**, 1234-1247 (2022).
2. Urva, S., O'Farrell, L., Du, Y., *et al.* The novel GIP, GLP-1 and glucagon receptor agonist retatrutide delays gastric emptying. *Diabetes Obes. Metab.* **25(9)**, 2784-2788 (2023).

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