

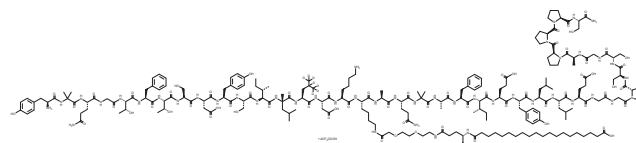
PRODUCT INFORMATION



Retatrutide-d₇ (trifluoroacetate salt)

Item No. 46531

Formal Name: L-tyrosyl-2-methylalanyl-L-glutaminyglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L-alpha-aspartyl-L-tyrosyl-L-seryl-L-isoleucyl-2-methyl-L-leucyl-(L-leucyl-4,5,5,5',5',5'-d₇)-L-alpha-aspartyl-L-lysyl-N⁶-[N-(19-carboxy-1-oxononadecyl)-L-gamma-glutamyl-2-[2-(2-aminoethoxy)ethoxy]acetyl]-L-lysyl-L-alanyl-L-glutaminy-2-methylalanyl-L-alanyl-L-phenylalanyl-L-isoleucyl-L-alpha-glutamyl-L-tyrosyl-L-leucyl-L-leucyl-L-alpha-glutamylglycylglycyl-L-prolyl-L-seryl-L-serylglycyl-L-alanyl-L-prolyl-L-prolyl-L-prolyl-L-serinamide, ditrifluoroacetate salt



MF: C₂₂₁H₃₃₅D₇N₄₆O₆₈ • 2CF₃COOH

FW: 4,966.5

Chemical Purity: ≥95% (Retatrutide)

Deuterium

Incorporation: ≥99% deuterated forms (d₁-d₇); ≤1% d₀

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-d₇ (trifluoroacetate salt) is intended for use as an internal standard for the quantification of retatrutide (Item No. 45527 | 39747) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Retatrutide-d₇ (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the retatrutide-d₇ (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Retatrutide-d₇ (trifluoroacetate salt) is soluble (≥10 mg/ml) in methanol and DMSO.

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

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).

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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