Retatrutide acetate

Cat. No.: HY-P3506B

Molecular Formula: $C_{221}H_{342}N_{46}O_{68}\cdot xC_2H_4O_2$

Target: GCGR; GLP Receptor

Pathway: GPCR/G Protein

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.

Retatrutide (acetate)

BIOLOGICAL ACTIVITY

Description	Retatrutide (LY3437943) acetate is a triple agonist peptide of the glucagon receptor (GCGR), glucosedependent insulinotropic polypeptide receptor (GIPR), and glucagon-like peptide-1 receptor (GLP-1R). Retatrutide acetate inhibits human GCGR, GIPR, and GLP-1R with EC_{50} values of 5.79, 0.0643 and 0.775 nM, respectively. Retatrutide acetate can be used for the research of obesity[1].
IC_{50} & Target	EC50 (for human): 5.79 (GCGR), 0.0643 (GIPR), 0.775 nM (GLP-1R) [1]. EC50 (for mouse): 2.32 (GCGR), 0.191 (GIPR), 0.794 nM (GLP-1R) [1]. Ki (for human): 5.6 (GCGR), 0.057 (GIPR), 7.2 nM (GLP-1R) [1]. Ki (for mouse): 73 (GCGR), 2.8 (GIPR), 1.3 nM (GLP-1R)[1].
In Vitro	Retatrutide (LY3437943) acetate has efficacy for human GCGR, GIPR, and GLP-1R with EC_{50} values of 5.79, 0.0643 and 0.775 nM, respectively[1]. Retatrutide acetate has efficacy for mouse GCGR, GIPR, and GLP-1R with EC_{50} values of 2.32, 0.191 and 0.794 nM, respectively[1]. Retatrutide acetate has binding affinity for human GCGR, GIPR, and GLP-1R with K_i values of 5.6, 0.057 and 7.2 nM, respectively[1]. Retatrutide acetate has binding affinity for mouse GCGR, GIPR, and GLP-1R with K_i values of 73, 2.8 and 1.3 nM, respectively [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Retatrutide (LY3437943) acetate (s.c.; 0.47 mg/kg; single) engages GCGR in vivo and can improve glucose tolerance in an ipGTT through either the GIP or GLP-1 receptors[1]. Retatrutide acetate (s.c.; 10 mL/kg; cycle every 3 days; for 21 days) causes great body weight loss and increases energy expenditure through glucagon receptor activatio[1]. Retatrutide acetate has safety and tolerability[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Tamer Coskun, 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. 2022 Sep 6;34(9):1234-1247.e9.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA