

Product Name : Cotadutide
Cat. No. : PC-72605
CAS No. : 1686108-82-6
Molecular Formula : C₁₆₇H₂₅₂N₄₂O₅₅
Molecular Weight : 3728.0
Target : Glucagon Receptor
Solubility : 10 mM in DMSO (37.3 mg/mL)

H-His-Ser-Gln-Gly-Thr-Phe-Thr-Ser-Asp-Lys(1)-Ser-Glu-Tyr-Leu-Asp-Ser-G
Phe-Val-Ala-Trp-Leu-Glu-Ala-Gly-Gly-OH, palmitoyl-Glu(1)-OH

Biological Activity

Cotadutide (MEDI-0382, MEDI0382) is a potent dual **GLP-1/glucagon receptor** peptide agonist with EC50 values of 6.9 pM and 10.2 pM, respectively.

Cotadutide (MEDI-0382, MEDI0382) stimulates a concentration-dependent increase in cAMP accumulation in rat (INS-1 832/3) and human (EndoC-βH1) β-cell lines (EC50: 226 pM and 1051 pM, respectively), as well as rat, mouse and human hepatocytes (EC50: 462 pM, 840 pM, 1447 pM, respectively).

Cotadutide (MEDI-0382, MEDI0382) potentiates glucose-stimulated insulin secretion in the rat (INS-1 832/3) pancreatic β-cell line and increases glucose output in rat hepatocytes.

Cotadutide (MEDI-0382, MEDI0382) induces mitochondrial turnover and enhances mitochondrial function in mouse primary hepatocytes.

Cotadutide (MEDI-0382, MEDI0382) (10- 30 nmol/kg, s.c.) suppresses food intake and reduces body weight in DIO mice, reduces hepatic fibrosis and inflammation in in ob/ob AMLN NASH mice

References

Henderson SJ, et al. *Diabetes Obes Metab.* 2016 Dec;18(12):1176-1190.

Ambery PD, et al. *Br J Clin Pharmacol.* 2018 Oct;84(10):2325-2335.

Ambery P, et al. *Lancet.* 2018 Jun 30;391(10140):2607-2618.

Boland ML, et al. *Nat Metab.* 2020 May;2(5):413-431.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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