

Mazdutide

Cat. No.:	HY-P3375
CAS No.:	2259884-03-0
Molecular Formula:	C ₂₁₀ H ₃₂₂ N ₄₆ O ₆₇
Molecular Weight:	4563.06
Target:	GCGR; GLP Receptor
Pathway:	GPCR/G Protein
Storage:	Sealed storage, away from moisture and light, under nitrogen Powder -80°C 2 years -20°C 1 year * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light, under nitrogen)

Mazdutide

SOLVENT & SOLUBILITY

In Vitro

H₂O : 22.22 mg/mL (4.87 mM; ultrasonic and adjust pH to 2 with HCl)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	0.2192 mL	1.0958 mL	2.1915 mL
	5 mM	---	---	---
	10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Mazdutide (IBI-362; LY-3305677) is a long-acting synthetic oxyntomodulin analog. Mazdutide is also a co-agonist of glucagon-like peptide (GLP-1R) and glucagon receptor (GCGR). Mazdutide binds human and mouse GCGR (K_i: 17.7 nM and 15.9 nM, respectively) and GLP-1R (K_i: 28.6 nM and 25.1 nM, respectively) and stimulates insulin secretion from mouse islets (EC₅₀: 5.2 nM). Mazdutide is used in studies of obesity and type 2 diabetes (T2D)^{[1][2][3]}.

In Vivo

Mazdutide (15, 30 nmol/kg; sc; single dose) significantly reduces body weight and physical intake in diabetic mice with diet-induced obesity (DIO)^[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Chen T, et al. The Design and Optimization of Monomeric Multitarget Peptides for the Treatment of Multifactorial Diseases. J Med Chem. 2022 Mar 10;65(5):3685-3705.

[2]. Jiang H, et al. A phase 1b randomised controlled trial of a glucagon-like peptide-1 and glucagon receptor dual agonist IBI362 (LY3305677) in Chinese patients with type 2 diabetes. Nat Commun. 2022 Jun 24;13(1):3613.

[3]. Chen Y, Mezo A, Coskun T, et al. 682-P: novel dual glucagon and glucagon-like peptide-1 receptor agonist LY3305677 improves glucose control, reduces body weight, and increases energy expenditure in mice[J]. Diabetes, 2021, 70(Supplement_1).

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

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