Amylin, amide, rat

Cat. No.:	HY-P1464
CAS No.:	124447-81-0
Molecular Formula:	$C_{167}H_{272}N_{52}O_{53}S_2$
Molecular Weight:	3920.44
Sequence:	Lys-Cys-Asn-Thr-Ala-Thr-Cys-Ala-Thr-Gln-Arg-Leu-Ala-Asn-Phe-Leu-Val-Arg-Ser-Ser-Asn-Asn-Leu-Gly-Pro-Val-Leu-Pro-Pro-Thr-Asn-Val-Gly-Ser-Asn-Thr-Tyr-NH2 (Disulfide bridge: Cys2-Cys7)
Sequence Shortening:	KCNTATCATQRLANFLVRSSNNLGPVLPPTNVGSNTY-NH2 (Disulfide bridge: Cys2-Cys7)
Target:	Amylin Receptor
Pathway:	GPCR/G Protein
Storage:	Sealed storage, away from moisture Powder -80°C 2 years -20°C 1 year * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

KCNTATCATQRLANFLVRSSNNLGPVLPPTNVGSNTY-NH_2 (Disulfide bridge: Cys_2-Cys_7)

SOLVENT & SOLUBILITY

In Vitro

H_2O : 100 mg/mL (25.51 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	0.2551 mL	1.2754 mL	2.5507 mL
	5 mM	0.0510 mL	0.2551 mL	0.5101 mL
	10 mM	0.0255 mL	0.1275 mL	0.2551 mL

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

BIOLOGICAL ACTIVITY

Description

Amylin, amide, rat is a potent and high affinity ligand of Amylin receptor AMY1 and AMY3 receptors and variably of AMY2 receptors; binding studies are generally used for the latter receptor.

IC_{50} & Target

Amylin receptor AMY1 and AMY3[1]

In Vitro

Amylin is an important, but poorly understood, 37 amino acid glucoregulatory hormone with great potential to target metabolic diseases. Amylin is a member of the calcitonin (CT) family of peptides, which includes CT itself, the CGRPs comprising two variants (αCGRP and βCGRP), adrenomedullin (AM) and AM2 (intermedin). Amylin is a centrally acting, neuroendocrine hormone synthesized with insulin in the beta cells of pancreatic islets. Amylin regulates glucose homeostasis by inhibiting gastric emptying, inhibiting the release of the counter-regulatory hormone glucagon and inducing meal-ending satiety. Amylin functions as a glucoregulatory and satiety-inducing hormone, which is protective against

postprandial spikes in blood glucose and overeating.[1]

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

REFERENCES

[1]. Bower RL, et al. Amylin structure-function relationships and receptor pharmacology: implications for Amylin mimetic drug development. Br J Pharmacol. 2016 Jun;173(12):1883-98.

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

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