Amylin, amide, human

Cat. No.:	HY-P1070
CAS No.:	122384-88-7
Molecular Formula:	$C_{165}H_{261}N_{51}O_{55}S_2$
Molecular Weight:	3903.28
Sequence:	Lys-Cys-Asn-Thr-Ala-Thr-Cys-Ala-Thr-Gln-Arg-Leu-Ala-Asn-Phe-Leu-Val-His-Ser-Ser-Asn-Asn-Phe-Gly-Ala-Ile-Leu-Ser-Ser-Thr-Asn-Val-Gly-Ser-Asn-Thr-Tyr-NH2 (Disulfide bridge: Cys2-Cys7)
Sequence Shortening:	KCNTATCATQRLANFLVHSSNNFGAILSSTNVGSNTY-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)

BIOLOGICAL ACTIVITY

Description

Amylin, amide, human, a 37-amino acid polypeptide, is a pancreatic hormone cosecreted with insulin that exerts unique roles in metabolism and glucose homeostasis. Amylin, amide, human inhibits glucagon secretion, delays gastric emptying, and acts as a satiety agent[1].

In Vitro

MCF-7 cells endogenously express human amylin receptor CTR1 and CTR2. Stimulation of the receptor with Amylin, amide, human results in the production of cAMP. Amylin, amide, human (0.001 nM-1000 μM) results in an EC_{50} of 35.2±7.5 nM[1].

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

Cell Viability Assay[1]

Cell Line:	MCF-7 cells
Concentration:	0.001 nM, 0.01 nM, 0.1 nM, 1 nM, 10 nM, 100 nM, 1 μM, 10μM, 100 μM, 1000 μM
Incubation Time:	
Result:	Resulted in the production of cAMP with an EC_{50} of 35.2±7.5 nM.

In Vivo

Amylin, amide, human (400 μg peptide /kg body weight) is injected by subcutaneous route in separated groups of swiss male mice. A typical PK curve for the free amylin is observed, with a half-time of 23 min[1].

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Animal Model:	Swiss male mice (8 weeks old)[1]
Dosage:	400 μg peptide /kg body weight (Pharmacokinetic Analysis)
Administration:	Subcutaneous route; 24 hours

Result:	Half-time of 23 min.

REFERENCES

[1]. Sisnande T, et al. Monoconjugation of Human Amylin with Methylpolyethyleneglycol. PLoS One. 2015 Oct 8;10(10):e0138803.

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