

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-NH ₂ (Disulfide bridge: Cys2-Cys7)												
Sequence Shortening:	KCNTATCATQRLANFLVHSSNFGAILSSTNVGSNTY-NH ₂ (Disulfide bridge: Cys2-Cys7)												
Target:	Others												
Pathway:	Others												
Storage:	<table border="0"> <tr> <td>Powder</td> <td>-80°C</td> <td>2 years</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 year</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Powder	-80°C	2 years		-20°C	1 year	In solvent	-80°C	6 months		-20°C	1 month
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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	<p>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 EC₅₀ of 35.2±7.5 nM^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>MCF-7 cells</td> </tr> <tr> <td>Concentration:</td> <td>0.001 nM, 0.01 nM, 0.1 nM, 1 nM, 10 nM, 100 nM, 1 μM, 10μM, 100 μM, 1000 μM</td> </tr> <tr> <td>Incubation Time:</td> <td></td> </tr> <tr> <td>Result:</td> <td>Resulted in the production of cAMP with an EC₅₀ of 35.2±7.5 nM.</td> </tr> </table>	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.
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In Vivo	<p>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]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Swiss male mice (8 weeks old)^[1]</td> </tr> <tr> <td>Dosage:</td> <td>400 μg peptide /kg body weight (Pharmacokinetic Analysis)</td> </tr> <tr> <td>Administration:</td> <td>Subcutaneous route; 24 hours</td> </tr> </table>	Animal Model:	Swiss male mice (8 weeks old) ^[1]	Dosage:	400 μg peptide /kg body weight (Pharmacokinetic Analysis)	Administration:	Subcutaneous route; 24 hours		
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REFERENCES

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

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

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