

Amylin (8-37), rat

Chemical Properties

CAS No.:	138398-61-5
Formula:	C140H227N43O43
Molecular Weight:	3200.61
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Amylin (8-37), rat is a truncated analog of native Amylin that selectively inhibits insulin-related glucose uptake and glycogen deposition in muscle tissue. Amylin is also known as islet amyloid precursor peptide (IAPP) and is co-secreted with insulin from pancreatic β -cells.
In vitro	Amylin (8-37), rat (Rat amylin-(8-37)) enhances insulin action and alters lipid metabolism in normal and insulin-resistant rats. Amylin (8-37) reduces plasma insulin ($P < 0.001$) and enhances several measures of whole body and muscle insulin sensitivity ($P < 0.05$) in both saline- and hGH-infused rats. Amylin-(8-37) corrects hGH-induced liver insulin resistance, increases basal plasma triglycerides and lowers plasma nonesterified fatty acids in both groups, and reduces muscle triglyceride and total long-chain acyl-CoA content in saline-treated rats ($P < 0.05$). In isolated soleus muscle, Amylin (8-37) blocks amylin-induced inhibition of glycogen synthesis but has no effect in the absence of amylin. Thus 1) hyperamylinemia accompanies insulin resistance induced by hGH infusion; 2) Amylin (8-37) increases whole body and muscle insulin sensitivity and consistently reduces basal insulin levels in normal and hGH-induced insulin resistant rats; and 3) Amylin (8-37) elicits a significant alteration of in vivo lipid metabolism[2].

Solubility Information

Solubility	H2O: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.312 mL	1.562 mL	3.124 mL
5 mM	0.062 mL	0.312 mL	0.625 mL
10 mM	0.031 mL	0.156 mL	0.312 mL
50 mM	0.006 mL	0.031 mL	0.062 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

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.
2. Hettiarachchi M, et al. Rat amylin-(8-37) enhances insulin action and alters lipid metabolism in normal and insulin-resistant rats. Am J Physiol. 1997 Nov;273(5 Pt 1):E859-67.

[Inhibitors](#) · [Natural Compounds](#) · [Compound Libraries](#)

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street,Wellesley Hills,MA 02481