

Pancreatic Polypeptide, rat

Chemical Properties

| | |
|-------------------|--|
| CAS No.: | 90419-12-8 |
| Formula: | C195H298N58O57S |
| Molecular Weight: | 4398.87 |
| Appearance: | N/A |
| Storage: | 0-4°C for short term (days to weeks), or -20°C for long term (months). |

Biological Description

| | |
|-------------|--|
| Description | Pancreatic Polypeptide, rat is an agonist of NPY receptor, with high affinity at NPYR4. Pancreatic polypeptide (PP) is a 36-amino acid, C-terminally amidated peptide, and is a member of the PP-fold peptide family. It is produced and secreted by the PP cells of the islets of Langerhans. |
| In vitro | Pancreatic Polypeptide, rat is an agonist of NPY receptor, with high affinity at NPYR4. Pancreatic Polypeptide (1 μ M) does not alter proliferation in BRIN BD11 or 1.1B4 beta-cells, but reverses the decreased cell viability in BRIN BD11 cells induced by streptozotocin. Pancreatic Polypeptide (0.1 nM-1 μ M) shows no effect on insulin secretion from isolated mouse islets, and does not affect the membrane potential and $(Ca^{2+})_i$ levels in BRIN BD11 cells at 1 μ M[1]. |
| In vivo | Pancreatic Polypeptide (25 nmol/kg bw, i.p.) reduces glucose-stimulated insulin concentrations but shows no effect on acute feeding behaviour in overnight fasted mice[1]. |

Solubility Information

| | |
|------------|---|
| Solubility | < 1 mg/ml refers to the product slightly soluble or insoluble |
|------------|---|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|----------|----------|----------|
| 1 mM | 0.227 mL | 1.137 mL | 2.273 mL |
| 5 mM | 0.045 mL | 0.227 mL | 0.455 mL |
| 10 mM | 0.023 mL | 0.114 mL | 0.227 mL |
| 50 mM | 0.005 mL | 0.023 mL | 0.045 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. Khan D, et al. Influence of neuropeptide Y and pancreatic polypeptide on islet function and beta-cell survival. Biochim Biophys Acta. 2017 Apr;1861(4):749-758.

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