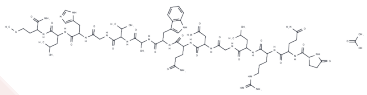
Data Sheet (Cat.No.TP1281L1)

TargetMol

Bombesin acetate(31362-50-2 free base)

Chemical Properties



CAS No. : 1222319-87-0

Formula: C73H114N24O20S

Molecular Weight: 1679.92

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Bombesin acetate is a 14-amino acid peptide originally isolated from the skin of the European fire-bellied toad (Bombina bombina). It has two known homologs in mammals called neuromedin B and gastrin-releasing peptide.
Targets(IC50)	Bombesin Receptor
In vitro	Bombesin is a tetradecapeptide with a COOH terminus ending in Gly-His-Leu-Met-NH2 and subsequently is shown to closely resemble two mammalian bombesin -related peptides, gastrin-releasing peptide (GRP) and neuromedin B (NMB)[1]. Bombesin is found to have stimulatory effects upon gastric and pancreatic secretions, release of gastrointestinal hormones, gallbladder contraction and bronchoconstriction. It is present in amphibian gastric endocrine cells, avian proventriculus endocrine cells and avian brain. In mammals it is present mainly in nerve cells and fibers. The only mammalian endocrine cell shown to date to have bombesin is the P-cell in fetal lung. Bombesin is also found in mammalian brain, with its highest concentration in the hypothalamus[2]. Bombesin is shown to be a potent mitogen for Swiss 3T3 cells. In the presence of a low concentration (3.5%) of serum, bombesin stimulates 3T3 cell proliferation. In serum-free medium, bombesin induces DNA synthesis in the absence of any other added growth factor (IC50=1 nM)[3].

Solubility Information

Solubility	DMSO: 5 mM,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.5953 mL	2.9763 mL	5.9527 mL
5 mM	0.1191 mL	0.5953 mL	1.1905 mL
10 mM	0.0595 mL	0.2976 mL	0.5953 mL
50 mM	0.0119 mL	0.0595 mL	0.1191 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Gonzalez N, et al. Bombesin-related peptides and their receptors: recent advances in their role in physiology and disease states. Curr Opin Endocrinol Diabetes Obes. 2008 Feb;15(1):58-64.