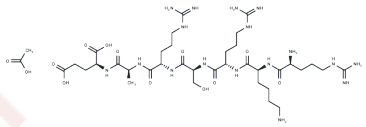
Data Sheet (Cat.No.TP1787L)

TargetMol

PKG Substrate acetate(81187-14-6 free base)

Chemical Properties



CAS No. :

Formula: C37H71N17O13

Molecular Weight: 962.08

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	PKG Substrate acetate is a selective substrate for cGMP-dependent protein kinase (PKG). PKG Substrate is a selective substrate for protein kinase G (PKG) with a strong preference for PKG Iα (Km = 59 μM) over PKG II (Km = 305 μM).
Targets(IC50)	PKA
In vitro	Incorporation of [33P]ATP into the synthetic peptide PKG substrate RKRSRAE is measured. N6-benzyl-ATP inhibits kinase activity of PKG Iα gatekeeper mutants but not WT. The serotonin transporter (SERT) is responsible for reuptake of serotonin (5-hydroxytryptamine) after its exocytotic release from neurons. SERT is regulated by several processes, including a cyclic GMP signaling pathway involving nitric oxide synthase, guanylyl cyclase, and PKG[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0394 mL	5.1971 mL	10.3941 mL
5 mM	0.2079 mL	1.0394 mL	2.0788 mL
10 mM	0.1039 mL	0.5197 mL	1.0394 mL
50 mM	0.0208 mL	0.1039 mL	0.2079 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

Wong A, et al. Cyclic GMP-dependent stimulation of serotonin transport does not involve direct transporter phosphorylation by cGMP-dependent protein kinase. J Biol Chem. 2012 Oct 19;287(43):36051-8.

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