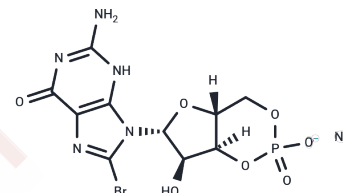


8-Bromo-cGMP sodium

Chemical Properties

CAS No. :	51116-01-9
Formula:	C10H10BrN5NaO7P
Molecular Weight:	446.09
Storage:	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	8-Bromo-cGMP sodium is a PKG activator, a membrane-permeable analog of cGMP. 8-Bromo-cGMP sodium has pain-relieving and vasodilatory effects, significantly inhibits Ca ²⁺ macroscopic currents, and inhibits high K ⁺ -stimulated insulin release.
Targets(IC50)	Calcium Channel,PKA
In vitro	8-Bromo-cGMP sodium (1 μM-0.1 mM) can inhibit acetylcholine-induced increases in intracellular calcium concentrations.[1] 8-Bromo-cGMP sodium (1-100 μM; 16 h) induces the synthesis of HO-1 protein in a concentration-dependent fashion.[2] 8-Bromo-cGMP sodium (1-100 μM; 8 h) increases the resistance of LLC-PK1 cells to CsA toxicity in concentration-dependently.[2]
In vivo	8-Bromo-cGMP sodium (0.3, 1, 3 nM; intrathecal administration; 10 min before the test; male ICR mice) significantly increases tail-flick latency in Vincristine-treated mice to the levels observed in vehicle-treated naive mice in a dose-dependent manner.[3] Additionally, 8-Bromo-cGMP sodium (10 mg/kg; iv; single dose) induces vasodilator responses in WT littermates and eNOS-Tg mice in the C57BL/6 background (19-35 g).[4]

Solubility Information

Solubility	H2O: 101 mg/mL (226.41 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2417 mL	11.2085 mL	22.417 mL
5 mM	0.4483 mL	2.2417 mL	4.4834 mL
10 mM	0.2242 mL	1.1209 mL	2.2417 mL
50 mM	0.0448 mL	0.2242 mL	0.4483 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

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