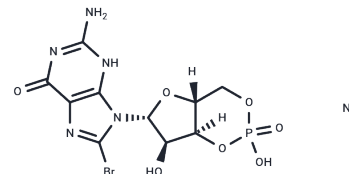


8-Bromo-cGMP sodium

Chemical Properties

CAS No. : 51116-01-9
Formula: C₁₀H₁₁BrN₅NaO₇P
Molecular Weight: 447.09
Appearance: no data available
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



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(IC ₅₀)	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 the tail-flick latency in Vincristine-treated mice to the level observed in vehicle-treated naive mice in dose-dependently.[3] 8-Bromo-cGMP sodium (10 mg/kg; iv; single dose) results in vasodilator responses in WT littermates and eNOS-Tg mice in C57BL/6 background (19-35 g).[4]

Solubility Information

Solubility	H ₂ O: 90.0 mg/mL (201.8 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	2.2367 mL	11.1834 mL	22.3669 mL
5 mM	0.4473 mL	2.2367 mL	4.4734 mL
10 mM	0.2237 mL	1.1183 mL	2.2367 mL
50 mM	0.0447 mL	0.2237 mL	0.4473 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.

Reference

Choi J, et al. Effects of 8-bromo-cyclic GMP on membrane potential of single swine tracheal smooth muscle cells. J Pharmacol Exp Ther. 1998;285(2):588-594.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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