

Product Name: Rp-8-Br-PET-cGMPS

Catalog No.: 3028

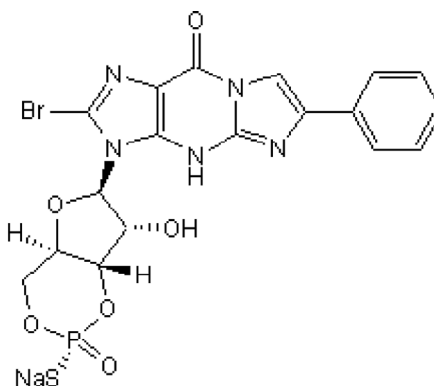
Batch No.: 5

CAS Number: 185246-32-6

IUPAC Name: 2-Bromo-3,4-dihydro-3-[3,5-O-[(*R*)-mercaptophosphinylidene]-β-D-ribofuranosyl]-6-phenyl-9*H*-imidazo[1,2-*a*]purin-9-one sodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₁₈ H ₁₄ BrN ₅ NaO ₆ PS
Batch Molecular Weight:	562.27
Physical Appearance:	White lyophilised solid
Solubility:	water to 20 mM DMSO to 40 mM
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 99.5% purity
Mass Spectrum:	Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Rp-8-Br-PET-cGMPS is a competitive, reversible cGMP-dependent protein kinase (PKG) inhibitor; cGMP analog. This product is sold in units of 560µg, equivalent to 1µmol.

Physical and Chemical Properties:

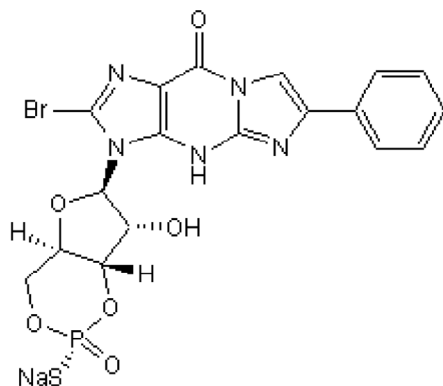
Batch Molecular Formula: C₁₈H₁₄BrN₅NaO₆PS

Batch Molecular Weight: 562.27

Physical Appearance: White lyophilised solid

Minimum Purity: ≥99%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

water to 20 mM

DMSO to 40 mM

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Valtcheva et al (2008) The commonly used cGMP-dependent protein kinase type I (cGKI) inhibitor Rp-8-Br-PET-cGMPS can activate cGKI *in vitro* and in intact cells. *J.Biol.Chem.* **284** 556. PMID: 19008225.

Qi et al (2007) Protein kinase G regulates the basal tension and plays a major role in nitrovasodilator-induced relaxation of porcine coronary veins. *Br.J.Pharmacol.* **152** 1060. PMID: 17891157.

Wei et al (1996) Identification of competitive antagonists of the rod photoreceptor cGMP-gated cation channel: beta-phenyl-1,N²-etheno-substituted cGMP analogues as probes of the cGMP-binding site. *Biochemistry* **35** 16815. PMID: 8988020.

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