Screening Libraries

Product Data Sheet

8-Bromoguanosine

Cat. No.: HY-W019033 CAS No.: 4016-63-1 Molecular Formula: $C_{10}H_{12}BrN_5O_5$ Molecular Weight: 362.14 Target: Others

Pathway: Others

Storage: -20°C, protect from light

* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (276.14 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7614 mL	13.8068 mL	27.6136 mL
	5 mM	0.5523 mL	2.7614 mL	5.5227 mL
	10 mM	0.2761 mL	1.3807 mL	2.7614 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (6.90 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.90 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.90 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	8-Bromoguanosine is a purine nucleoside, a brominated derivative of guanosine. 8-Bromoguanosine can reduce the conformational heterogeneity of RNA to enhance its function ^{[1][2][3]} .
In Vitro	8-Bromoguanosine (16-18 h) induces cytotoxic activity to YAC cells ^[2] . 8-Bromoguanosine (18 h) induces macrophage cytolytic activity to P815 cells ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Goodman MG, Weigle WO. Intracellular lymphocyte activation and carrier-mediated transport of C8-substituted guanine ribonucleosides. Proc Natl Acad Sci U S A. 1984 Feb;81(3):862-6.
- [2]. Koo GC, Jewell ME, Manyak CL, Sigal NH, Wicker LS. Activation of murine natural killer cells and macrophages by 8-bromoguanosine. J Immunol. 1988 May 1;140(9):3249-52.
- [3]. Yajima R, et al. A conformationally restricted guanosine analog reveals the catalytic relevance of three structures of an RNA enzyme. Chem Biol. 2007 Jan;14(1):23-30.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

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