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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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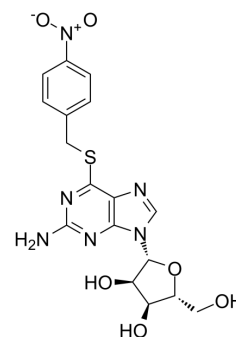
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NBTGR

Cat. No.:	HY-108322		
CAS No.:	13153-27-0		
Molecular Formula:	C ₁₇ H ₁₈ N ₆ O ₆ S		
Molecular Weight:	434.43		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (230.19 mM; Need ultrasonic)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		2.3019 mL	11.5093 mL	23.0187 mL
	5 mM		0.4604 mL	2.3019 mL	4.6037 mL
	10 mM		0.2302 mL	1.1509 mL	2.3019 mL

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

BIOLOGICAL ACTIVITY

Description

NBTGR (p-Nitrobenzylthioguanosine) is a potent inhibitor of nucleoside transport; inhibits adenosine uptake with a K_i of 70 nM.

IC₅₀ & Target

K_i: 70 nM (adenosine uptake)^[1]

In Vitro

A group of purine ribonucleosides with alkarylmercapto substituents at the purine 6-position are potent inhibitors of several aspects of nucleoside metabolism that involved the transfer of ribosyl groups. NBTGR is one of the compounds that inhibits nucleoside transport by human erythrocytes; initial rates of uridine uptake are reduced to zero upon exposure of cells to 1 μM NBTGR. The inhibitor is firmly bound because repeated washing cannot restore uridine transport capability to NBTGR-treated cells. NBTGR inhibits the influx of uridine, inosine, and cytidine, without inhibiting the uptake of the corresponding bases, or that of D-glucose or L-leucine. Uridine antagonizes the NBTGR inhibition of uridine transport in a concentration-dependent manner. NBTGR and related compounds appear to interact with the mechanism for the facilitated transport of nucleosides^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Turnheim K, et al. Inhibition of adenosine uptake in human erythrocytes by adenosine-5'-carboxamides, xylosyladenine, dipyridamole, hexobendine, and p-nitrobenzylthioguanosine. *Biochem Pharmacol.* 1978;27(18):2191-7.
- [2]. Parterson A, et al. Nucleoside Transport II Inhibition by p-Nitrobeazylthioguanosine and Related Compounds. *Can. J. Biochem.* 49,271-274 (1971)
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Caution: Product has not been fully validated for medical applications. For research use only.

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