

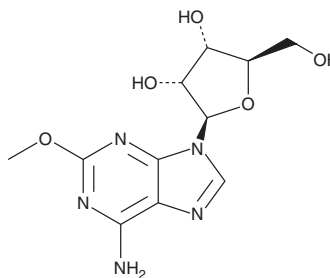
PRODUCT INFORMATION



Spongosine

Item No. 41832

CAS Registry No.:	24723-77-1
Formal Name:	2-methoxy-adenosine
Synonyms:	2-Methoxyadenosine, NSC 36899
MF:	C ₁₁ H ₁₅ N ₅ O ₅
FW:	297.3
Purity:	≥95%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Synthetic



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Spongosine is supplied as a solid. A stock solution may be made by dissolving the spongosine in the solvent of choice, which should be purged with an inert gas. Spongosine slightly soluble (0.1-1 mg/ml) in DMSO.

Description

Spongosine is a nucleoside that has been found in *Tethyidae* and has diverse biological activities.¹⁻⁴ It is an antagonist of adenosine A₁, A_{2A}, and A₃ receptors (K_is = 155, 970, and 156 nM, respectively, in CHO cells expressing the human receptors).² Spongosine (100 μM) inhibits collagen-induced platelet aggregation in isolated human whole blood and platelet-rich plasma.³ It decreases contractile force and frequency in spontaneously contracting isolated guinea pig atrial muscles (EC₅₀s = 32.7 and 127.7 μM, respectively).⁴

References

1. Searle, P.A. and Molinski, T.F. Isolation of spongosine and 2'deoxy-spongosine from a Western Australian sponge of the order Hadromerida (tethyidae). *J. Nat. Prod.* **57(10)**, 1452-1454 (1994).
2. Gao, Z.-G., Mamedova, L.K., Chen, P., *et al.* 2-Substituted adenosine derivatives: Affinity and efficacy at four subtypes of human adenosine receptors. *Biochem. Pharmacol.* **68(10)**, 1985-1993 (2004).
3. Ojha, L.M., Gulati, D., Seth, N., *et al.* A simple method for synthesis of spongosine, azaspongosine, and their antiplatelet effects. *Nucleos. Nucleot.* **14(9-10)**, 1889-1900 (1995).
4. Fuhrman, F.A. and Fuhrman, G.J. Effects of some naturally-occurring purine ribosides on purinergic receptors in cardiac and smooth muscle. *Comp. Biochem. Physiol. C* **72(2)**, 203-210 (1982).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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