

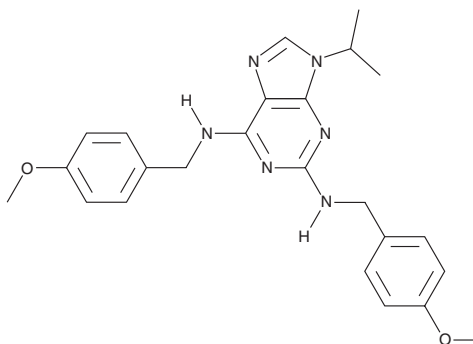
PRODUCT INFORMATION



Myoseverin

Item No. 14642

CAS Registry No.: 267402-71-1
Formal Name: N²,N⁶-bis[(4-methoxyphenyl)methyl]-9-(1-methylethyl)-9H-purine-2,6-diamine
MF: C₂₄H₂₈N₆O₂
FW: 432.5
Purity: ≥98%
UV/Vis.: λ_{max}: 231, 262, 285 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Myoseverin is supplied as a crystalline solid. A stock solution may be made by dissolving the myoseverin in the solvent of choice, which should be purged with an inert gas. Myoseverin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of myoseverin in these solvents is approximately 0.11, 10, and 3.3 mg/ml, respectively.

Myoseverin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, myoseverin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Myoseverin has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Myoseverin is a trisubstituted purine which binds microtubules, reversibly altering cellular function.^{1,2} At 20 μM, it directly binds tubulin and disrupts the structure of the microtubule cytoskeleton, resulting in myotube fission.¹ Myoseverin arrests cell cycle in the G₂/M phase, followed by DNA synthesis and cell proliferation after removal of the compound.¹

References

1. Rosania, G.R., Chang, Y.-T., Perez, O., *et al.* Myoseverin, a microtubule-binding molecule with novel cellular effects. *Nat. Biotechnol.* **18(3)**, 304-308 (2000).
2. Moon, H.-S., Jacobson, E.M., Khersonsky, S.M., *et al.* A novel microtubule destabilizing entity from orthogonal synthesis of triazine library and zebrafish embryo screening. *J. Am. Chem. Soc.* **124(39)**, 11608-11609 (2002).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM