

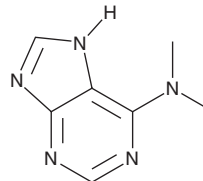
PRODUCT INFORMATION



6-(Dimethylamino)purine

Item No. 38963

CAS Registry No.: 938-55-6
Formal Name: N,N-dimethyl-9H-purin-6-amine
Synonyms: N,N-Dimethyladenine, N⁶,N⁶-Dimethyladenine, 6-DMAP, NSC 401568
MF: C₇H₉N₅
FW: 163.2
Purity: ≥98%
UV/Vis.: λ_{max}: 215, 276 nm
Supplied as: A 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

6-(Dimethylamino)purine (6-DMAP) is supplied as a solid. A stock solution may be made by dissolving the 6-DMAP in the solvent of choice, which should be purged with an inert gas. 6-DMAP is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 6-DMAP in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

6-DMAP is a non-selective protein kinase inhibitor.^{1,2} It enhances the inactivation of MAPK and induces the formation of pronuclei in primary mouse oocytes.^{2,3} 6-DMAP (0.6-12 mM) also induces pronuclear formation, cortical contraction, and cortical granule breakdown, markers of oocyte activation, in *Xenopus* oocytes.⁴

References

1. Vesely, J., Havlicek, J., Strnad, M., *et al.* Inhibition of cyclin-dependent kinases by purine analogues. *Eur. J. Biochem.* **224(2)**, 771-786 (1994).
2. Lan, G.-C., Ma, S.-F., Wang, Z.-Y., *et al.* Effects of post-treatment with 6-dimethylaminopurine (6-DMAP) on ethanol activation of mouse oocytes at different ages. *J. Exp. Zool. A Comp. Exp. Biol.* **301(10)**, 837-843 (2004).
3. Liu, L. and Yang, X. Interplay of maturation-promoting factor and mitogen-activated protein kinase inactivation during metaphase-to-interphase transition of activated bovine oocytes. *Biol. Reprod.* **61(1)**, 1-7 (1999).
4. Zhang, S.C. and Masui, Y. Activation of *Xenopus laevis* eggs in the absence of intracellular Ca activity by the protein phosphorylation inhibitor, 6-dimethylaminopurine (6-DMAP). *J. Exp. Zool.* **262(3)**, 317-329 (1992).

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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