

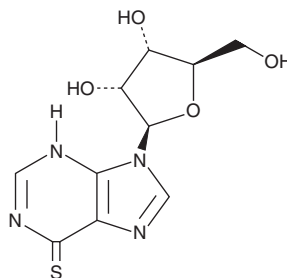
PRODUCT INFORMATION



6-Mercaptopurine Riboside

Item No. 40331

CAS Registry No.: 574-25-4
Formal Name: 6-thio-inosine
Synonyms: NSC 4911, 6-MPR, 6-Thioinosine
MF: $C_{10}H_{12}N_4O_4S$
FW: 284.3
Purity: $\geq 98\%$
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-Mercaptopurine riboside (6-MPR) is supplied as a solid. A stock solution may be made by dissolving the 6-MPR in the solvent of choice, which should be purged with an inert gas. 6-MPR is sparingly soluble (1-10 mg/ml) in DMSO.

Description

6-MPR is a derivative of the inhibitor of purine synthesis and interconversion 6-mercaptopurine (Item No. 23675).¹ It is active against *S. faecalis* when used at concentrations ranging from 0.05 to 15 mg/ml.² 6-MPR (0.5, 1, or 1.5 mM) inhibits autophagy and cholesterol synthesis in isolated and washed rat hepatocytes, an effect that can be prevented by the adenosine kinase inhibitor 5-iodotubercidin (Item No. 10010375).³ *In vivo*, 6-MPR (17, 35, or 70 mg/kg per day) decreases tumor growth in mice bearing 6-mercaptopurine susceptible, but not 6-mercaptopurine-resistant, adenocarcinoma 755 tumors.²

References

1. Bennett, L.L., Jr., Montgomery, J.A., Brockman, R.W., *et al.* Design of analogs of purine nucleosides with specifically altered activities as substrates for nucleoside- metabolizing enzymes. *Adv. Enzyme Regul.* **16**, 255-271 (1977).
2. Skipper, H.E., Thomson, J.R., Hutchinson, D.J., *et al.* Anticancer activity of purine antagonists and their ribosides. I. Comparative studies with 6-mercaptopurine and 6-mercaptopurine riboside. *Proc. Soc. Exp. Biol. Med.* **95**(1), 135-138 (1957).
3. Samari, H.R. and Seglen, P.O. Inhibition of hepatocytic autophagy by adenosine, aminoimidazole-4-carboxamide riboside, and N⁶-mercaptopurine riboside. Evidence for involvement of amp-activated protein kinase. *J. Biol. Chem.* **273**(37), 23758-23763 (1998).

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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