

Catalog # 10-4698 6-Mercaptopurine

CAS# 6112-76-1 3,7-Dihydropurine-6-thione monohydrate; 6-MP Lot # FBS3005

$$H_{N}$$
 $H_{2}O$

6-Mercaptopurine (6-MP) is a purine antimetabolite drug used to treat acute lymphocytic leukemia, Crohn's disease, ulcerative colitis, and inflammatory bowel disease. It inhibits DNA synthesis by inhibiting the production of purine containing nucleotides. The immunomodulatory activity of 6-Mercaptopurine is mainly the result of the 6-MP metabolite 6-thioguanine triphosphate (6-TGTP) binding to small GTPase Rac1.²

1) Sahasranaman et al. (20088), Clinical pharmacology and pharmacogenetics of thiopurines; Eur. J. Clin. Pharmacol., 64 753

2) De Boer et al. (2018), Thiopurines in Inflammatory Bowel Disease: New Findings and Perspectives; J. Crohns Colitis., 12 610

PHYSICAL DATA

Molecular Weight: 170.19

Molecular Formula: C₅H₄N₄S⋅H₂O Purity: >98% by HPLC

NMR: (Conforms)

Solubility: DMSO (>50 mg/ml); ethanol (5 mg/ml with warming)

Physical Description: Yellow solid

Storage and Stability: Store as supplied desiccated at room temperature for up to 2 years from the date of purchase.

Solutions in DMSO may be stored at -20°C for up to 3 months.

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