

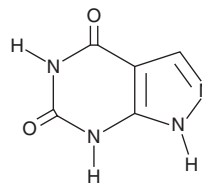
PRODUCT INFORMATION



Oxipurinol

Item No. 18716

CAS Registry No.: 2465-59-0
Formal Name: 1H-pyrazolo[3,4-d]pyrimidine-4,6(5H,7H)-dione
Synonyms: Alloxanthine, NSC 76239
MF: C₅H₄N₄O₂
FW: 152.1
Purity: ≥95%
UV/Vis.: λ_{max}: 254 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

Oxipurinol is supplied as a crystalline solid. A stock solution may be made by dissolving the oxipurinol in the solvent of choice. Oxipurinol is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 3 mg/ml.

Oxipurinol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, oxipurinol should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Oxipurinol has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Oxipurinol is an inhibitor of xanthine oxidase and active metabolite of the xanthine oxidase inhibitor allopurinol (Item No. 10012597).¹ Oxipurinol is formed by the oxidation of allopurinol and binds to an enzyme-bound molybdenum cofactor that keeps xanthine oxidase in an inactive state. It inhibits *de novo* purine and pyrimidine biosynthesis in human fibroblast cultures.² Oxipurinol also inhibits the growth of *L. donovani* when used at concentrations ranging from 20 to 50 µg/ml.³

References

1. Becker, M.A., Argubright, K.F., Fox, R.M., *et al.* Oxipurinol-associated inhibition of pyrimidine synthesis in human lymphoblasts. *Mol. Pharmacol.* **10**(4), 657-668 (1974).
2. Kaiser, W.J. and Stocker, K. Purine and pyrimidine biosynthesis in *Neurospora crassa* and human skin fibroblasts. Alteration by ribosides and ribotides of allopurinol and oxipurinol. *Adv. Exp. Med. Biol.* **41**, 629-635 (1974).
3. Marr, J.J. and Berens, R.L. Antileishmanial effect of allopurinol. II. Relationship of adenine metabolism in *Leishmania* species to the action of allopurinol. *J. Infect. Dis.* **136**(6), 724-732 (1977).

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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