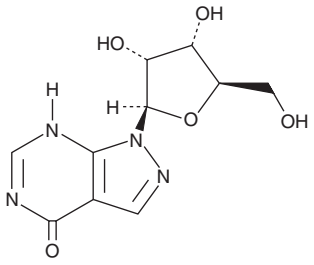
PRODUCT INFORMATION

Allopurinol Riboside

Item No. 33459

CAS Registry No.:	16220-07-8
Formal Name:	1,5-dihydro-1-β-D-ribofuranosyl-4H-pyrazolo[3,4-d]pyrimidin-4-one
Synonyms:	Allopurinol Ribonucleoside, NSC 138437, NSC 252629
MF:	$C_{10}H_{12}N_4O_5$
FW:	268.2
Purity:	≥95%
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

Allopurinol riboside is supplied as a solid. A stock solution may be made by dissolving the allopurinol riboside in the solvent of choice, which should be purged with an inert gas. Allopurinol riboside is soluble in the organic solvent DMSO at a concentration of approximately 5 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of allopurinol riboside can be prepared by directly dissolving the solid in aqueous buffers. The solubility of allopurinol riboside in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Allopurinol riboside is a ribonucleoside and a ribose-containing derivative of the xanthine oxidase inhibitor allopurinol (Item No. 10012597).[1] It inhibits the growth of *Leishmania* promastigotes and prevents amastigote maturation into the promastigote phase of the parasite life cycle in cell-free assays.[2] Allopurinol riboside (239, 511, and 929 mg/kg per day) prevents mortality in mouse models of *T. cruzi* infection but does not eradicate the infection.[1]

References

1. Croft, S.L. and Neal, R.A. The effect of allopurinol ribonucleoside and formycin B on *Trypanosoma cruzi* infections in mice. *Trans. R. Soc. Trop. Med. Hyg.* **79(4)**, 517-518 (1985).
2. Nelson, D.J., LaFon, S.W., Tuttle, J.V., *et al.* Allopurinol ribonucleoside as an antileishmanial agent. Biological effects, metabolism, and enzymatic phosphorylation. *J. Biol. Chem.* **254(22)**, 11544-11549 (1979).

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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