

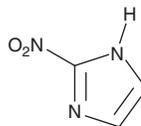
PRODUCT INFORMATION



Azomycin

Item No. 29395

CAS Registry No.: 527-73-1
Formal Name: 2-nitro-1H-imidazole
Synonym: 2-Nitroimidazole
MF: C₃H₃N₃O₂
FW: 113.1
Purity: ≥98%
UV/Vis.: λ_{max}: 215, 316 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

Azomycin is supplied as a crystalline solid. A stock solution may be made by dissolving the azomycin in the solvent of choice, which should be purged with an inert gas. Azomycin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of azomycin in these solvents is approximately 30 and 20 mg/ml, respectively.

Azomycin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, azomycin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Azomycin has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Azomycin is a nitroimidazole antibiotic and radiosensitizer.^{1,2} It is active against *B. subtilis*, *M. pyogenes*, *E. coli*, *S. dysenteriae*, *S. paradysenteriae*, *S. typhi*, *S. paratyphosa*, *B. anthracis*, *M. tuberculosis*, and *M. phlei* *in vitro*.¹ Azomycin enhances radiation-induced cell death in HT-1080, LoVo, and V79-379A cancer cells.²

References

1. Fattorusso, E., Minale, L., and Sodano, G. Aeroplysinin-1, an antibacterial bromo-compound from the sponge *Verongia aerophoba*. *J. Chem. Soc. Perkin 1* **1**, 16-18 (1972).
2. Watts, M.E., Dennis, M.F., and Roberts, I.J. Radiosensitization by misonidazole, pimonidazole and azomycin and intracellular uptake in human tumour cell lines. *Int. J. Radiat. Biol.* **57(2)**, 361-372 (1990).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/04/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM