PRODUCT INFORMATION



Secnidazole

Item No. 21236

CAS Registry No.: 3366-95-8

Formal Name: α,2-dimethyl-5-nitro-1H-imidazole-1-ethanol

Synonyms: PM 185184, RP 14539

MF: $C_7H_{11}N_3O_3$ FW: 185.2 **Purity:** ≥98%

 λ_{max} : 236, 311 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Secnidazole is supplied as a crystalline solid. A stock solution may be made by dissolving the secnidazole in the solvent of choice, which should be purged with an inert gas. Secnidazole is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of secnidazole in ethanol is approximately 3 mg/ml and approximately 30 mg/ml in and DMSO and DMF.

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 secnidazole can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of secnidazole in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Secnidazole is a 5-nitroimidazole derivative with antiparasitic and antibiotic activity. 1,2 It exhibits a mean minimum inhibitory concentration of 2.59 µM against 16 clinical isolates of B. fragilis.² It shows efficacy against ameobiasis, giardiasis, H. pylori and other parasites and microbes. 1,3-6

References

- 1. Nagata, N., Mariott, D., Harkenss, J., et al. Int. J. Parasitol. Drugs Drug Resist. 2, 204-215 (2012).
- 2. Jokipii, L. and Jokipii, A.M.M. Antimicrob. Agents Chemother. 28(4), 561-564 (1985).
- 3. Almirall, P., Escobedo, A.A., Ayala, I., et al. J. Parasitol. Res. 2011, 1-6 636857 (2011).
- 4. Silva, F.M., Eisig, J.N., Chehter, E.Z., et al. Rev. Hosp. Clin. Fac. Med. Sao Paulo 57(1), 9-14 (2002).
- 5 Omrani, G., Rastegar-Lari, A., and Khamseh M., J. Pak. Med. Assoc. 459(6), 159 (1995).
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WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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