

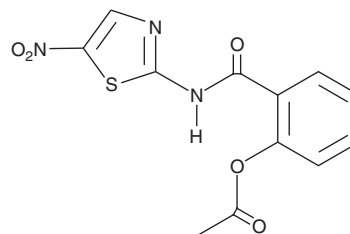
PRODUCT INFORMATION



Nitazoxanide

Item No. 13692

CAS Registry No.: 55981-09-4
Formal Name: 2-(acetyloxy)-N-(5-nitro-2-thiazolyl)-benzamide
Synonyms: NSC 697855, NTZ
MF: C₁₂H₉N₃O₅S
FW: 307.3
Purity: ≥95%
UV/Vis.: λ_{max}: 238, 341 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Nitazoxanide (NTZ) is supplied as a crystalline solid. A stock solution may be made by dissolving the NTZ in the solvent of choice, which should be purged with an inert gas. NTZ is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of NTZ in these solvents is approximately 20 and 15 mg/ml, respectively.

NTZ is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, NTZ should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. NTZ 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

NTZ is a broadly applicable antiparasitic compound that is rapidly metabolized to tizaxonide whereupon it enters cells and inhibits pyruvate-ferredoxin oxidoreductase.¹ NTZ demonstrates IC₅₀ values of 2.5 and 10 μM for *Giardia* and *Cryptosporidium*, respectively. Additionally, NTZ kills replicating and nonreplicating *M. tuberculosis* with an IC₅₀ value of 1 μM, while seemingly evading the development of resistance.¹

Reference

1. de Carvalho, L.P.S., Lin, G., Jiang, X., *et al.* Nitazoxanide kills replicating and nonreplicating *Mycobacterium tuberculosis* and evades resistance. *J. Med. Chem.* **52**(19), 5789-5792 (2009).

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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