

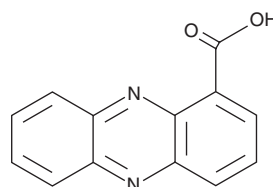
PRODUCT INFORMATION



Tubermycin B

Item No. 33659

CAS Registry No.: 2538-68-3
Formal Name: 1-phenazinecarboxylic acid
Synonyms: NSC 15851, PCA, Phenazine-1-carboxylate, Phenazinecarboxylic Acid, Shenqinmycin
MF: C₁₃H₈N₂O₂
FW: 224.2
Purity: ≥98%
UV/Vis.: λ_{max}: 250 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Bacterium/*Pseudomonas fluorescens*



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

Laboratory Procedures

Tubermycin B is supplied as a crystalline solid. A stock solution may be made by dissolving the tubermycin B in the solvent of choice, which should be purged with an inert gas. Tubermycin B is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of tubermycin B in these solvents is approximately 1 mg/ml.

Tubermycin B is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, tubermycin B should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Tubermycin B has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Tubermycin B is a bacterial metabolite that has been found in *Pseudomonas* and has antifungal and fungicidal activities.^{1,2} It is active against *A. flavus*, *C. albicans*, and *T. rubrum* (MICs = 64, 8, and 4 µg/ml, respectively), as well as the plant pathogenic fungi *F. oxysporum* and *R. solani* (MICs = 125 and 32 µg/ml, respectively).¹ Tubermycin B (10-500 µg/ml) prevents the development of foliar anthracnose lesions in cucumber plants infected with the plant pathogenic fungus *C. orbiculare*.²

References

1. Gorantla, J.N., Kumar, S.N., Nisha, G.V., *et al.* Purification and characterization of antifungal phenazines from a fluorescent *Pseudomonas* strain FPO4 against medically important fungi. *J. Mycol. Med.* **24**(3), 185-192 (2014).
2. Lee, J.Y., Moon, S.S., and Hwang, B.K. Isolation and *in vitro* and *in vivo* activity against *Phytophthora capsici* and *Colletotrichum orbiculare* of phenazine-1-carboxylic acid from *Pseudomonas aeruginosa* strain GC-B26. *Pest. Manag. Sci.* **59**(8), 872-882 (2003).

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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