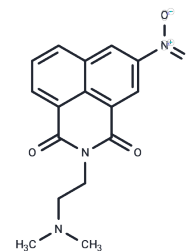


Mitonafide

Chemical Properties

CAS No. :	54824-17-8
Formula:	C ₁₆ H ₁₅ N ₃ O ₄
Molecular Weight:	313.31
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Mitonafide (NSC-300288) suppresses the activity of M. tuberculosis NAD ⁺ dependent DNA ligase A. Mitonafide is a DNA intercalating agent.
Targets(IC50)	Antibacterial,DNA/RNA Synthesis

Solubility Information

Solubility	DMSO: 13 mg/mL (41.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1917 mL	15.9586 mL	31.9173 mL
5 mM	0.6383 mL	3.1917 mL	6.3835 mL
10 mM	0.3192 mL	1.5959 mL	3.1917 mL
50 mM	0.0638 mL	0.3192 mL	0.6383 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

- Korycka-Machala M, et al. Naphthalimides Selectively Inhibit the Activity of Bacterial, Replicative DNA Ligases and Display Bactericidal Effects against Tubercle Bacilli. *Molecules*. 2017 Jan 17;22(1). pii: E154.
- Kumar A, et al. Solvent free, catalyst free, microwave or grinding assisted synthesis of bis-cyclic imide derivatives and their evaluation for anticancer activity. *Bioorg Med Chem Lett*. 2017 Feb 1;27(3):501-504.
- Johnson CA, et al. Effect of intercalator substituent and nucleotide sequence on the stability of DNA- and RNA-naphthalimide complexes. *Bioorg Med Chem*. 2015 Jul 1;23(13):3586-91.
- Machado KE, et al. Apoptotic events induced by maleimides on human acute leukemia cell lines. *Chem Res Toxicol*. 2013 Dec 16;26(12):1904-16.

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