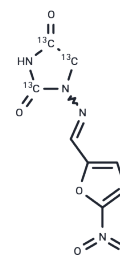


Nitrofurantoin-13C3

Chemical Properties

CAS No. :	1217226-46-4
Formula:	C8H6N4O5
Molecular Weight:	241.136
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	Nitrofurantoin-13C3 is intended for use as an internal standard for the quantification of nitrofurantoin by GC- or LC-MS. Nitrofurantoin (T1313) is a nitrofuran antibiotic. 1
Targets(IC50)	Antibacterial, Antibiotic
In vivo	In vivo, nitrofurantoin (25-100 mg/kg) reduces <i>E. coli</i> replication and abscess formation in the renal medulla of infected rats in a dose-dependent manner. It prevents kidney and bladder infection in rats following bladder inoculation with clinical isolates of <i>P. mirabilis</i> . Nitrofurantoin also prevents alkalization of urine, as well as calculi and abscess formation, in a rat model of <i>P. vulgaris</i> urinary tract infection. 2 Formulations containing nitrofurantoin have been used to treat urinary tract infections.

Solubility Information

Solubility	DMSO: Slightly soluble Methanol: Slightly soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.147 mL	20.7348 mL	41.4697 mL
5 mM	0.8294 mL	4.147 mL	8.2939 mL
10 mM	0.4147 mL	2.0735 mL	4.147 mL
50 mM	0.0829 mL	0.4147 mL	0.8294 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

Rocha, H., Da Silva Teles, E., and Barros, M. Site of action of nitrofurantoin in experimental urinary tract infection *Appl. Microbiol.* 18(4)547-549(1969)

Hossack, D.J.N. *Proteus vulgaris* urinary tract infections in rats; treatment with nitrofurans derivatives *Br. J. Pharmacol. Chemother.* 19(2)306-312(1962)

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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