Data Sheet (Cat.No.T12248)

TargetMol

Nourseothricin sulfate

Chemical Properties

CAS No. :	96736-11-7
Formula:	C50H94N20O22S
Molecular Weight:	1359.47
Storage:	Store at low temperature 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	Nourseothricin sulfate (Streptothricin sulfate) is a broad-spectrum antibiotic that inhibits protein biosynthesis in prokaryotic cells and significantly impedes the growth of eukaryotes, including fungi.
Targets(IC50)	Antibacterial,Antibiotic,Antifungal
In vivo	Renal handling of Nourseothricin is characterized in experiments on renal cortical slices under various experimental conditions.?Following administration in vivo the renal tubular transport system for organic anions (p-aminohippurate, PAH) is not influenced by Nourseothricin.?There is a high degree of accumulation of Nourseothricin in renal cortical slices.?In contrast to PAH accumulation there is no influence of nitrogen atmosphere, simultaneous administration of PAH, probenecid or trishydroxyaminomethane on Nourseothricin accumulation.?Age dependent differences in Nourseothricin accumulation does not exist[1].

Solubility Information

Solubility	H2O: 250 mg/mL (183.9 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.7356 mL	3.6779 mL	7.3558 mL
5 mM	0.1471 mL	0.7356 mL	1.4712 mL
10 mM	0.0736 mL	0.3678 mL	0.7356 mL
50 mM	0.0147 mL	0.0736 mL	0.1471 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

Bräunlich H, et al. Renal handling of nourseothricin. Pharmazie. 1988 Mar;43(3):200-2.
Florencio CS, et al. Genetic manipulation of Fonsecaea pedrosoi using particles bombardment and Agrobacterium mediated transformation. Microbiol Res. 2018 Mar;207:269-279.
Suárez-Moreno ZR, et al. Plant-Growth Promotion and Biocontrol Properties of Three Streptomyces spp. Isolates to Control Bacterial Rice Pathogens.. Front Microbiol. 2019 Feb 25;10:290.