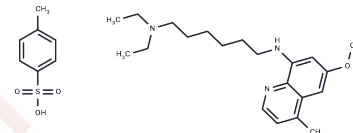


Sitamaquine tosylate

Chemical Properties

CAS No. :	1019640-33-5
Formula:	C ₂₈ H ₄₁ N ₃ O ₄ S
Molecular Weight:	515.71
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	Sitamaquine is an antileishmanial agent. It is active against <i>L. donovani</i> , <i>L. infantum</i> , <i>L. mexicana</i> , <i>L. braziliensis</i> , and <i>L. tropica</i> (EC ₅₀ s = 9.5–19.8 μM). It inhibits mitochondrial complex II, also known as succinate dehydrogenase (SDH), in a cell-free assay when used at concentrations ranging from 10 to 200 μM. Sitamaquine (100 μM) increases intracellular levels of reactive oxygen species (ROS) and decreases intracellular ATP levels, as well as induces phosphatidylserine externalization, chromatin fragmentation, and depolarization of the mitochondrial membrane potential, markers of apoptosis, in <i>L. donovani</i> promastigotes.
Targets(IC50)	Others, Mitochondrial Metabolism, Parasite

Solubility Information

Solubility	DMSO: 30 mg/mL (58.17 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	1.9391 mL	9.6954 mL	19.3907 mL
5 mM	0.3878 mL	1.9391 mL	3.8781 mL
10 mM	0.1939 mL	0.9695 mL	1.9391 mL
50 mM	0.0388 mL	0.1939 mL	0.3878 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

López-Martín, C., Pérez-Victoria, J.M., Carvalho, L., et al. Sitamaquine sensitivity in Leishmania species is not mediated by drug accumulation in acidocalcisomes. *Antimicrob. Agents Chemother.* 52(11):4030-4036(2008)

Carvalho, L.J.M., Luque-Ortega, J.R., López-Martín, C., et al. The 8-aminoquinoline analogue sitamaquine causes oxidative stress in Leishmania donovani promastigotes by targeting succinate dehydrogenase. *Antimicrob. Agents Chemother.* 55(9):4204-4210(2011)

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