Data Sheet (Cat.No.T12059L)



Mitoquinone mesylate

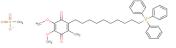
Chemical Properties

CAS No.: 845959-50-4
Formula: C38H47O7PS

Molecular Weight: 678.81

Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	Mitoquinone mesylate is a TPP-based, mitochondrially targeted antioxidant to protect against oxidative damage.		
Targets(IC ₅₀)	Others: None		
In vitro	Normal rat kidney (NRK) cells exposed to CS result in a ~2-fold increase in fluorescence due to mitochondrial superoxide compared with untreated cells. Mitoquinone offers significant protection against CS-induced mitochondrial superoxide generation[1].		
In vivo	Mitoquinone (MitoQ) treatment nearly doubles lung MPO activity induced by Caerulein with a significant increase of serum IL-6 levels also evident at 10 mg/kg (dose 1)[2].		

Solubility Information

Solubility	DMSO: 50 mg/mL (73.66 mM)
	H2O: < 0.1 mg/mL (insoluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.473 mL	7.366 mL	14.732 mL
5 mM	0.295 mL	1.473 mL	2.946 mL
10 mM	0.147 mL	0.737 mL	1.473 mL
50 mM	0.029 mL	0.147 mL	0.295 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

- 1. Mitchell T, et al. The mitochondria-targeted antioxidant mitoquinone protects against cold storage injury of renaltubular cells and rat kidneys. J Pharmacol Exp Ther. 2011 Mar;336(3):682-92.
- 2. Huang W, et al. Effects of the mitochondria-targeted antioxidant mitoquinone in murine acute pancreatitis. Mediators Inflamm. 2015;2015:901780.

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