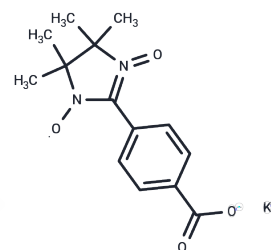


Carboxy-PTIO potassium

Chemical Properties

CAS No. :	148819-94-7
Formula:	C ₁₄ H ₁₆ KN ₂ O ₄
Molecular Weight:	315.39
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Carboxy-PTIO potassium (cPTIO potassium) is a nitric oxide (NO) scavenger in endothelial cells, inhibiting pterin accumulation and exhibiting neuroprotective activity. It reacts rapidly with NO to produce NO ₂ .
Targets(IC50)	NO Synthase
In vitro	In A375-S2 cells, Carboxy-PTIO potassium (200 μM, 1 h before Physalin A, 24 h) reverses Physalin A-induced reduction in mTOR and p-mTOR levels, while inhibiting the conversion of LC3I to LC3II in A375-S2 cells. [1]
In vivo	Carboxy-PTIO potassium (0.056-1.70 mg/kg/min, intravenous) treatment improved hypotension, renal dysfunction, and survival in LPS-treated rats. Carboxy-PTIO potassium did not affect the parameters of normal mice. [2]

Solubility Information

Solubility	DMSO: 140 mg/mL (443.89 mM), Sonication is recommended. H ₂ O: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (31.71 mM), Solution. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1707 mL	15.8534 mL	31.7068 mL
5 mM	0.6341 mL	3.1707 mL	6.3414 mL
10 mM	0.3171 mL	1.5853 mL	3.1707 mL
50 mM	0.0634 mL	0.3171 mL	0.6341 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

He H, et al. Nitric oxide induces apoptosis and autophagy; autophagy down-regulates NO synthesis in physalin A-treated A375-S2 human melanoma cells. *Food Chem Toxicol.* 2014 Sep;71:128-35.

Yoshida M, et al. Therapeutic effects of imidazolineoxyl N-oxide against endotoxin shock through its direct nitric oxide-scavenging activity. *Biochem Biophys Res Commun.* 1994 Jul 29;202(2):923-30.

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