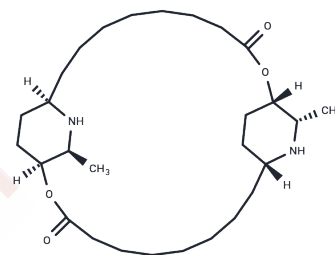


Carpaine

Chemical Properties

CAS No. :	3463-92-1
Formula:	C ₂₈ H ₅₀ N ₂ O ₄
Molecular Weight:	478.71
Storage:	Keep away from direct sunlight, Keep away from moisture 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	Carpaine is a natural product exhibiting antimalarial activity, with an approximate IC ₅₀ of 4μM against <i>P. falciparum</i> in NL20 cells. It demonstrates cardioprotective and anti-inflammatory effects by activating FAK, ERK1/2, and AKT pathways while inhibiting ROS production.
Targets(IC ₅₀)	ERK,FAK,Akt,Parasite,ROS
In vivo	Circulatory effects of Carpaine were studied in Wistar male rats weighing 314 +/- 13 g, under pentobarbital (30 mg/kg) anesthesia. Increasing dosages of Carpaine from 0.5 mg/kg to 2.0 mg/kg resulted in progressive decrease in systolic, diastolic, and mean arterial blood pressure[3].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0889 mL	10.4447 mL	20.8895 mL
5 mM	0.4178 mL	2.0889 mL	4.1779 mL
10 mM	0.2089 mL	1.0445 mL	2.0889 mL
50 mM	0.0418 mL	0.2089 mL	0.4178 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

Zunjar V, et al. Antithrombocytopenic activity of carpaine and alkaloidal extract of *Carica papaya* Linn. leaves in busulfan induced thrombocytopenic Wistar rats. *J Ethnopharmacol.* 2016 Apr 2;181:20-5.

Julianti T, et al. Quantification of the antiplasmodial alkaloid carpaine in papaya (*Carica papaya*) leaves. *Planta Med.* 2014 Aug;80(13):1138-42.

Hornick CA, et al. Effect of carpaine, a papaya alkaloid, on the circulatory function in the rat. *Res Commun Chem Pathol Pharmacol.* 1978 Nov;22(2):277-89.

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