Carpaine hydrochloride

Chemical Properties

CAS No.:	5853-21-4
Formula：	C28H51ClN2O4
Molecular Weight：	515.17
Appearance:	N/A
Storage：	0-4℃ for short term (days to weeks), or -20℃ for long term (months).
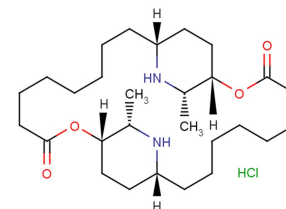
Biological Description

Description	Carpaine hydrochloride, an alkaloid isolated from Carica papaya Linn, has anti-thrombocytopenic activity. It has the anti-plasmodial activity to prevent malaria.
Targets(IC_{50})	Others: None
In vivo	Carpaine hydrochloride affects the myocardium directly, it reduces cardiac output, stroke work, stroke volume, and cardiac power in rats [3].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.941 mL	9.706 mL	19.411 mL
5 mM	0.388 mL	1.941 mL	3.882 mL
10 mM	0.194 mL	0.971 mL	1.941 mL
50 mM	0.039 mL	0.194 mL	0.388 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 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. 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.

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

3. 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.