Data Sheet (Cat.No.T10098)



PGS-IN-1

Chemical Properties

CAS No.: 102271-49-8

Formula: C19H26O3

Molecular Weight: 302.41

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	PGS-IN-1 (KME-4) is a potent inhibitor of prostaglandin synthetase (PGS, IC50: 0.28 μ M) and 5-lipoxygenase (IC50: 1.05 μ M).
Targets(IC50)	Lipoxygenase,Prostaglandin Receptor
In vitro	PGS-IN-1 is the trans isomer of the synthesized α -benzulidene- γ -butyrolactone. PGS-IN-1 exhibits potent anti-inflammatory and PGS inhibitory activity with IC50 of 0.28 μ M[1]. PGS-IN-1 also shows potent inhibitory activity against 5-lipoxygenase with IC50 of 1.05 μ M[1].

Solubility Information

Solubility	DMSO: 55 mg/mL (181.87 mM), Sonication is recommended.
	(< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3068 mL	16.5338 mL	33.0677 mL
5 mM	0.6614 mL	3.3068 mL	6.6135 mL
10 mM	0.3307 mL	1.6534 mL	3.3068 mL
50 mM	0.0661 mL	0.3307 mL	0.6614 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.

Reference

Katsumi I, et al. Studies on styrene derivatives. I. Synthesis and antiinflammatory activities of alpha-benzylidenegamma-butyrolactone derivatives. Chem Pharm Bull (Tokyo). 1986 Jan; 34(1):121-9.

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