Data Sheet (Cat.No.TN1228)

TargetMol

25S-Inokosterone

Chemical Properties

CAS No. : 19595-18-7

Formula: C27H44O7

Molecular Weight: 480.64

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	25S-Inokosterone is a plant ecdysosteroid isolated from the roots of Achyranthes bidentata. 25S-Inokosterone shows potential for use in studies of LPS-induced acute kidney injury.
Targets(IC50)	TNF
In vitro	Methods: Rat renal tubular epithelial NRK52e cells were divided into a control group, an LPS model group (1 μg/mL), and a 25S-Inokosterone group (10 μM + LPS). The cells were treated for 24 hours, and cell viability was assessed using the CCK-8 assay, while apoptosis rates were measured by flow cytometry. Results: 25S-Inokosterone significantly reversed the LPS-induced decrease in cell viability and significantly reduced LPS-induced apoptosis. [1] Methods: RBL-2H3 cells were pretreated with 200 μg/mL 25S-Inokosterone for 1 h, then stimulated with PMA (1 μg/mL) + A23187 (1 μM) for 24 h; TNF-α levels in the supernatant were measured by ELISA. Results: 25S-Inokosterone significantly inhibited TNF-α secretion, with an inhibition rate of approximately 80%. [2]

Solubility Information

Solubility	DMSO: 40 mg/mL (83.22 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0806 mL	10.4028 mL	20.8056 mL
5 mM	0.4161 mL	2.0806 mL	4.1611 mL
10 mM	0.2081 mL	1.0403 mL	2.0806 mL
50 mM	0.0416 mL	0.2081 mL	0.4161 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

Wang S, et al. Raw and salt-processed Achyranthes bidentata attenuate LPS-induced acute kidney injury by inhibiting ROS and apoptosis via an estrogen-like pathway. Biomed Pharmacother. 2020;129:110403.
Kim KO, et al. Phytoecdysones from the Roots of Achyranthes japonica Nakai and their Anti-atopy Activity. J Appl Biol Chem. 2015;58(1):13-19.