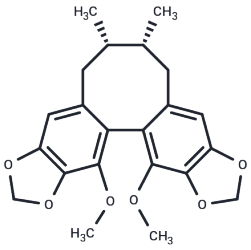
Data Sheet (Cat.No.T5S1923)

TargetMol

Schisandrin C

Chemical Properties



CAS No. : 61301-33-5

Formula: C22H24O6

Molecular Weight: 384.42

Storage: 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	Schisandrin C (Wuweizisu-C) is a phytochemical lignan isolated from Schizandra chinensis Baill; shows anticancer-effects in human leukemia U937 cells.
Targets(IC50)	Apoptosis,Virus Protease
In vitro	Schisandrin C inhibited cell growth in a dose-dependent manner, which was associated with the induction of G1 arrest of the cell cycle and apoptosis. Schisandrin C induced G1 arrest was correlated with down-regulation of cyclin D1, cyclin E, cyclin-dependent kinase (Cdk) 4 and E2Fs expression, inhibition of phosphorylation of retinoblastoma protein (pRB), and up-regulation of the Cdk inhibitor p21(WAF1/CIP1). In addition, schisandrin C-induced apoptosis was associated with down-regulation of expression of the anti-apoptotic proteins Bcl-2 and Bcl-xL, proteolytic activation of caspase-3 and -9, and a concomitant degradation of poly(ADP-ribose) polymerase (PARP). Furthermore, schisandrin C-induced apoptosis was significantly inhibited by a caspase-3 specific inhibitor z-DEVD-fmk . Schisandrin C was found to reduce nitric oxide (NO) production from LPS-stimulated Raw 264.7 cells. Pre-treatment of Raw 264.7 cells with gomisin J, gomisin N, or schisandrin C reduced the expression of mRNA and the secretion of pro-inflammatory cytokines .

Solubility Information

Solubility	DMSO: 28.33 mg/mL (73.7 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2.83 mg/mL (7.36 mM),Solution. 10% DMSO+90% Saline: < 2.83 mg/mL (7.36 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween-80+45% Saline: 0.5 mg/mL (1.3 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6013 mL	13.0066 mL	26.0132 mL
5 mM	0.5203 mL	2.6013 mL	5.2026 mL
10 mM	0.2601 mL	1.3007 mL	2.6013 mL
50 mM	0.052 mL	0.2601 mL	0.5203 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

E Q, Tang M, et al.Protection of seven dibenzocyclooctadiene lignans from Schisandra chinensis against serum and glucose deprivation injury in SH-SY5Y cells.Cell Biol Int. 2015 Dec;39(12):1418-24
Wang Z, Xie S, Li L, et al.Schisandrin C inhibits AKT1-regulated cell proliferation in A549 cells.International Immunopharmacology.2024, 142: 113110.
Oh SY, et al. Anti-inflammatory effects of gomisin N, gomisin J, and schisandrin C isolated from the fruit of Schisandra chinensis. Biosci Biotechnol Biochem. 2010;74(2):285-91.

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