Data Sheet (Cat.No.TN2180)

TargetMol
A DRUG SCREENING EXPERT

Sappanchalcone

Chemical Properties

CAS No.:	94344-54-4
Formula:	C16H14O5
Molecular Weight:	286.3
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Sappanchalcone shows xanthine oxidase inhibitory activity, is a xanthine oxidase inhibitor.
Targets(IC_{50})	TNF-α: None IL Receptor: None Bcl-2: None
In vitro	The influence of the ethyl acetate (EtOAc) extract of Lignum Sappan and its constituents on growth-related signaling were evaluated by a luciferase assay in cells stably-transfected with NF-κB, STAT1, or STAT3 responsive luciferase reporter plasmid. The inhibitory effect on the cell cycle was determined by flow cytometric analysis. The anti-tumor activities were assessed in vitro and in vivo. The EtOAc extract of Lignum Sappan had inhibitory activities on growth-related signaling and cell mitosis. Three major active compounds were Sappanchalcone, brazilin, and butein. Sappanchalcone blocked cell cycle progression in the G2/M phase, brazilin inhibited TNFα±/NF-κB signaling, while butein inhibited IL-6/STAT3 signaling, as well as TNFα±/NF-κB signaling. The three compounds all demonstrated cytotoxic activities against human tumor cells in vitro. In a S180 tumor cell-bearing mice model, the anti-tumor efficacy of the EtOAc extract was better than the individual compounds acting alone[1]

Solubility Information

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

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.493 mL	17.464 mL	34.928 mL
5 mM	0.699 mL	3.493 mL	6.986 mL
10 mM	0.349 mL	1.746 mL	3.493 mL
50 mM	0.07 mL	0.349 mL	0.699 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. Inhibitory activities of Lignum Sappan extractives on growth and growth-related signaling of tumor cells.Chin J Nat Med. 2014 Aug;12(8):607-12.

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