Product Data Sheet



Trifolirhizin

Cat. No.: HY-N0616 6807-83-6 CAS No.: Molecular Formula: $C_{22}H_{22}O_{10}$ Molecular Weight: 446.4

Target: Tyrosinase; TNF Receptor

Pathway: Metabolic Enzyme/Protease; Apoptosis

Storage: -20°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (224.01 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.2401 mL	11.2007 mL	22.4014 mL
	5 mM	0.4480 mL	2.2401 mL	4.4803 mL
	10 mM	0.2240 mL	1.1201 mL	2.2401 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.60 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.60 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.60 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Trifolirhizin is a pterocarpan flavonoid isolated from the roots of Sophora flavescens. Trifolirhizin possesses potent tyrosinase inhibitory activity with an IC ₅₀ of 506 μ M ^[1] . Trifolirhizin exhibits potential anti-inflammatory and anticancer activities ^[2] .
IC ₅₀ & Target	IC50: 506 μM (tyrosinase) ^[1]

REFERENCES

- [1]. Hyun SK, et al. Inhibitory effects of kurarinol, kuraridinol, and trifolirhizin from Sophora flavescens on tyrosinase and melanin synthesis. Biol Pharm Bull. 2008 Jan;31(1):154-8.
- [2]. Zhou H, et al. Anti-Inflammatory and antiproliferative activities of trifolirhizin, a flavonoid from Sophora flavescens roots. J Agric Food Chem. 2009 Jun 10;57(11):4580-5.
- [3]. Hyun SK, et al. Inhibitory effects of kurarinol, kuraridinol, and trifolirhizin from Sophora flavescens on tyrosinase and melanin synthesis. Biol Pharm Bull. 2008 Jan;31(1):154-8.

Caution: Product has not been fully validated for medical applications. For research use only.

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