Sciadopitysin

Cat. No.: HY-N2119

CAS No.: 521-34-6

Molecular Formula: $C_{33}H_{24}O_{10}$

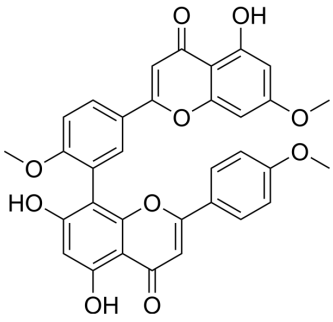
Molecular Weight: 580.54

Target: NF-κB; TNF Receptor

Pathway: NF-κB; Apoptosis

Storage: 4°C, protect from light

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



SOLVENT & SOLUBILITY

In Vitro

DMSO : 20 mg/mL (34.45 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.7225 mL	8.6127 mL	17.2253 mL
	5 mM	0.3445 mL	1.7225 mL	3.4451 mL
	10 mM	0.1723 mL	0.8613 mL	1.7225 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 mg/mL (3.45 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Sciadopitysin is a type of biflavonoids in leaves from ginkgo biloba[1]. Sciadopitysi inhibits RANKL-induced osteoclastogenesis and bone loss by inhibiting NF-κB activation and reducing the expression of c-Fos and NFATc1[2].

IC_{50} & Target

NF-κB

In Vitro

Sciadopitysin (2.5, 5, 10 μM) strongly reduces RANKL-induced osteoclast-specific genes expression, including cathepsin K (CTSK), tartrate-resistant acid phosphatase (TRAP) and MMP-9. Furthermore, Sciadopitysin apparently attenuates RANKL-increased expressions of c-Fos and NFATc1[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Sciadopitysin (i.p.; 10 mg/kg; every other day for 8 days) can reverse the bone loss in LPS-induced mice model (C57BL/6 mice; 6 weeks old)[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Arch Pharm (Weinheim). 2024 May 29:e2400066.

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REFERENCES

[1]. Briançon-Scheid F, et al. HPLC Separation and Quantitative Determination of Biflavones in Leaves from Ginkgo biloba. Planta Med. 1983 Dec;49(12):204-7.

[2]. Sciadopitysin suppresses RANKL-mediated osteoclastogenesis and prevents boneloss in LPS-treated mice. Int Immunopharmacol. 2017 Aug;49:109-117.

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