Asperosaponin VI

Cat. No.: HY-N0265 CAS No.: 39524-08-8 Molecular Formula: $C_{47}H_{76}O_{18}$ Molecular Weight: 929.1

Target: Caspase; Apoptosis

Pathway: **Apoptosis**

-20°C, protect from light Storage:

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

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

H₂O: 100 mg/mL (107.63 mM; Need ultrasonic)

DMSO: $\geq 25 \text{ mg/mL} (26.91 \text{ mM})$

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.0763 mL	5.3816 mL	10.7631 mL
	5 mM	0.2153 mL	1.0763 mL	2.1526 mL
	10 mM	0.1076 mL	0.5382 mL	1.0763 mL

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

In Vivo

- 1. Add each solvent one by one: PBS Solubility: 25 mg/mL (26.91 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (2.69 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (2.69 mM); Clear solution
- 4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (2.69 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Asperosaponin VI, A saponin component from Dipsacus asper, induces osteoblast differentiation through BMP\(\mathbb{Z}\)2/p38 and ERK1/2 pathway^[1]. Asperosaponin ⊠ inhibits apoptosis in hypoxia-induced cardiomyocyte by increasing the Bcl-2/Bax ratio and decreasing active caspase-3 expression, as well as enhancing of p-Akt and p-CREB^[2].

IC₅₀ & Target

Caspase 3

CUSTOMER VALIDATION

• Diabetes. 2022 Jan 14;db210535.

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REFERENCES

[1]. Niu Y, et al. Asperosaponin VI, a saponin component from Dipsacus asper wall, induces osteoblast differentiation through bone morphogenetic protein-2/p38 and extracellular signal-regulated kinase 1/2 pathway. Phytother Res. 2011 Nov;25(11):1700-6.

[2]. Li C, et al. Asperosaponin VI protects cardiac myocytes from hypoxia-induced apoptosis via activation of the PI3K/Akt and CREB pathways. Eur J Pharmacol. 2010 Dec 15;649(1-3):100-7.

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

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