Screening Libraries

Product Data Sheet

Valepotriate

Cat. No.: HY-N0718 CAS No.: 18296-44-1 Molecular Formula: $C_{22}H_{30}O_{8}$ 422.47 Molecular Weight: Target: **Apoptosis** Pathway: **Apoptosis**

-20°C, protect from light Storage:

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

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (236.70 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.3670 mL	11.8352 mL	23.6703 mL
	5 mM	0.4734 mL	2.3670 mL	4.7341 mL
	10 mM	0.2367 mL	1.1835 mL	2.3670 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 (5.92 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (5.92 mM); Suspended solution; Need ultrasonic
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.92 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Valepotriate can be isolated from Valeriana jatamansi Jones, has anti-epileptic and anti-cancer activities^{[1][2]}.

In Vivo

Valepotriate showed significant anti-epileptic activity against MES- and PTZ-induced epilepsy at doses of 5, 10, and 20 mg/kg, and ED50 values for MES- and PTZ-induced epilepsy were 7.84 and 7.19 mg/kg, respectively.

Furthermore, valepotriate (10 and 20 mg/kg) can significantly prolong sleeping time and shorten the latency time on the pentobarbital sodium-induced sleeping time test. Furthermore, valepotriate (5, 10, and 20 mg/kg) could significantly upregulate the expression of GABAA, GAD65, and Bcl-2 and down-regulate the expression of caspase-3, but had no significant effect on the expression of GABAB^[2].

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

REFERENCES
[1]. Yan YY, et al. A novel derivative of valepotriate inhibits the PI3K/AKT pathway and causes Noxa-dependent apoptosis in human pancreatic cancer cells. Acta Pharmacol Sin. 2020 Feb 11.
[2]. Wu A, et al. Anti-epileptic Effects of Valepotriate Isolated from Valeriana jatamansi Jones and Its Possible Mechanisms. Pharmacogn Mag. 2017 Jul-Sep;13(51):512-516.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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