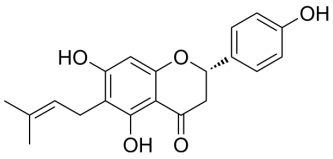
(2S)-6-Prenylnaringenin

Cat. No.:	HY-107198
CAS No.:	68236-13-5
Molecular Formula:	$C_{20}H_{20}O_5$
Molecular Weight:	340
Target:	GABA Receptor
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	4°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 (294.12 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.9412 mL	14.7059 mL	29.4118 mL
	5 mM	0.5882 mL	2.9412 mL	5.8824 mL
	10 mM	0.2941 mL	1.4706 mL	2.9412 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 (7.35 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (7.35 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.35 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(2S)-6-Prenylnaringenin is the most efficient compound in forebrain. (2S)-6-Prenylnaringenin acts as a $GABA_A$ positive allosteric modulator at α+β- binding interface[1].

In Vitro

(2S)-6-Prenylnaringenin (6-Prenylnaringenin) displays a modulatory activity at low micromolar concentrations. (2S)-6-Prenylnaringenin potentiates GABA-induced displacement of [^{3}H]EBOB binding in a concentration-dependent manner where the IC_{50} value for this potentiation in native GABAA receptors is 3.7 μM, respectively[1].

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

REFERENCES

[1]. Ali Y Benkherouf, et al. Hops Compounds Modulatory Effects and 6-prenylnaringenin Dual Mode of Action on GABA AReceptors. Eur J Pharmacol. 2020 Apr 15;873:172962.

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