Kavain

Cat. No.: HY-N2096

CAS No.: 3155-48-4

Molecular Formula: $C_{14}H_{14}O_3$

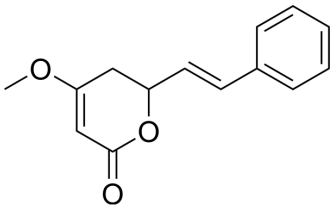
Molecular Weight: 230.26

Target: GABA Receptor

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (217.15 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.3429 mL	21.7146 mL	43.4292 mL
	5 mM	0.8686 mL	4.3429 mL	8.6858 mL
	10 mM	0.4343 mL	2.1715 mL	4.3429 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (10.86 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Kavain is a class of kavalactone isolated from Piper methysticum, which has anxiolytic properties in animals and humans. Kavain positively modulated γ-Aminobutyric acid type A (GABAA) receptor[1].

In Vitro

Two-electrode voltage clamp technique is used to characterize the functional properties of the major anxiolytic kavalactone, Kavain at human recombinant α1β2, β2γ2L, αxβ2γ2L, α1βxγ2L and α4β2δ γ-Aminobutyric acid type A receptors (GABAARs) expressed in Xenopus oocytes. Kavain positively modulates all receptors regardless of the subunit composition, but the degree of enhancement is greater at α4β2δ than at α1β2γ2L GABAARs. The modulatory effect of Kkavain is unaffected by flumazenil, indicating that Kavain does not enhance GABAARs via the classical benzodiazepine binding site.[1].

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

REFERENCES

[1]. Chua HC, et al. Kavain, the Major Constituent of the Anxiolytic Kava Extract, Potentiates GABAA Receptors: Functional Characteristics and Molecular Mechanism. PLoS One. 2016 Jun 22;11(6):e0157700.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA