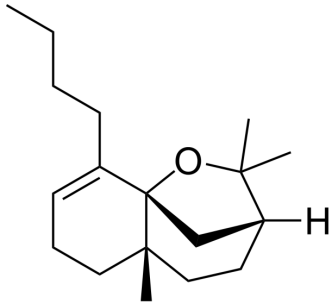
4-Butyl-alpha-agarofuran

Cat. No.:	HY-19496
CAS No.:	272126-07-5
Molecular Formula:	$C_{18}H_{30}O$
Molecular Weight:	262.43
Target:	5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	4-Butyl-alpha-agarofuran (AF 5) is an anxiolytic and antidepressant agent. 4-Butyl-alpha-agarofuran a α-agarofuran derivative that can be isolated from Gharu-wood. 4-Butyl-alpha-agarofuran can be used for the research of neurological disease research[1].
In Vitro	4-Butyl-alpha-agarofuran (2 mg) is completely metabolized in 100 min to the hydroxy derivative I and carbonyl derivative II in human liver microsome incubation system[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	4-Butyl-alpha-agarofuran (0.5-10 mg/kg; i.p., once) shows antianxiety effects in a social interaction test and the serotonin (5-HT) levels of striatum, cortex, and midbrain are significantly decreased[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Wistar rats[1]
Dosage:	0.5, 1.0, 2.0, 4.0, 5.0 and 10.0 mg/kg
Administration:	Intraperitoneal injection; 0.5, 1.0, 2.0, 4.0, 5.0 and 10.0 mg/kg; once
Result:	Dose-dependently prolonged the total time spent in social interaction test at a dose range of 0.5-2.0 mg/kg. Decreased the 5-HT levels in brain tissues, decreased dopamine levels of in rat striatum and midbrain and also reduced the cortical level of epinephrine at a dose of 5 mg/kg after acute administration. Decresed the extracellular dopamine level in the striatum at a dose of 10 mg/kg.

REFERENCES

[1]. Zhang Y, et al. Effects of novel anxiolytic 4-butyl-alpha-agarofuran on levels of monoamine neurotransmitters in rats. Eur J Pharmacol. 2004 Nov 3;504(1-2):39-44.

[2]. Li N, et al. [In vitro metabolic studies of the novel anti-anxietic drug AF-5 and its metabolites in human liver microsome incubation system]. Yao Xue Xue Bao. 2001 Jul;36(7):528-31. Chinese.

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

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