Data Sheet (Cat.No.T3S1692)

TargetMol
YOUR TARGET MOLECULES

Octahydrocurcumin

Chemical Properties

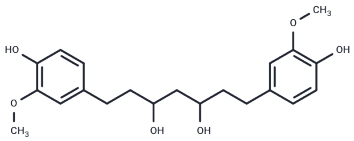
CAS No. : 36062-07-4

Formula: C21H28O6

Molecular Weight: 376.44

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Octahydrocurcumin has antioxidant and and anti-inflammatory activities, it can inhibit the lipopolysaccharide (LPS)-induced inflammatory response via the mechanism of inhibiting NF-kB translocation to the nucleus. Octahydrocurcumin exhibits potent cytotoxic effect (IC50 =19.46 ug/mL) and shows high antimicrobial activity.
Targets(IC50)	Anti-infection,NF-κB,Reactive Oxygen Species,ROS
In vitro	OKT3-induced PBMC proliferation was inhibited by curcumin, isocurcumin, bisdesmethoxy-, diacetyl-, tetrahydro-, hexahydro-, and octahydrocurcumin as well as by vanillin, ferulic acid, and dihydroferulic acid with IC50-values of 2.8, 2.8, 6.4, 1.0, 25, 38, 82, 729, 457, and >1,000?μM, respectively. The investigated substances with the strongest effect on radical scavenging were tetrahydro-, hexahydro-, and octahydrocurcumin with IC50?values of 10.0, 11.7, and 12.3?μM, respectively. IC50-values of dihydroferulic acid, ferulic acid, and curcumin were 19.5, 37, and 40?μM. The substances with the lowest radical scavenging activities were vanillin, isocurcumin, diacetylcurcumin, and bisdesmethoxycurcumin with IC50?values higher than 100?μM each[1].

Solubility Information

Solubility	Ethanol: 10 mg/mL (26.56 mM),Sonication is recommended. DMSO: 100 mg/mL (265.65 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6565 mL	13.2823 mL	26.5647 mL
5 mM	0.5313 mL	2.6565 mL	5.3129 mL
10 mM	0.2656 mL	1.3282 mL	2.6565 mL
50 mM	0.0531 mL	0.2656 mL	0.5313 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Different Curcuminoids Inhibit T-Lymphocyte Proliferation Independently of Their Radical Scavenging Activities. Pharmaceutical Research,2008, 25,(8):1822-7.