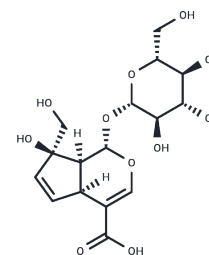


## Monotropein

## Chemical Properties

CAS No. :	5945-50-6
Formula:	C <sub>16</sub> H <sub>22</sub> O <sub>11</sub>
Molecular Weight:	390.34
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	1. Monotropein (Monotropeine) has antinociceptive action. 2. Monotropein has anti-apoptosis and anti-catabolic activity in chondrocytes. 3. Monotropein has anti-inflammatory action by inhibition of the expressions of inflammatory mediators via NF- $\kappa$ B inactivation, and support its possible therapeutic role in colitis. 4. Monotropein inhibit the expressions of inducible nitric oxide synthase (iNOS), cyclooxygenase-2 (COX-2), tumor necrosis factor- $\alpha$ (TNF- $\alpha$ ), and interleukin-1 $\beta$ (IL-1 $\beta$ ) mRNA in LPS-induced RAW 264.7 macrophages.
Targets(IC50)	Apoptosis,Others,NF- $\kappa$ B,Nrf2,Interleukin,ROS

## Solubility Information

Solubility	Ethanol: Insoluble, DMSO: 250 mg/mL (640.47 mM),Sonication is recommended. Pyridine, Methanol, etc.: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (25.62 mM),Solution. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	2.5619 mL	12.8093 mL	25.6187 mL
5 mM	0.5124 mL	2.5619 mL	5.1237 mL
10 mM	0.2562 mL	1.2809 mL	2.5619 mL
50 mM	0.0512 mL	0.2562 mL	0.5124 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Wang F , Wu L , Li L , et al. Monotropein exerts protective effects against IL-1 $\beta$ -induced apoptosis and catabolic responses on osteoarthritis chondrocytes[J]. International Immunopharmacology, 2014, 23(2):575-580.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481