

(1E,6E)-Bis(demethoxy)curcumin

Chemical Properties

CAS No. : 33171-05-0

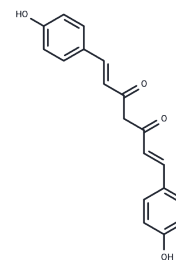
Formula: C19H16O4

Molecular Weight: 308.33

Storage: Keep away from moisture, Keep away from direct sunlight

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 | (1E,6E)-Bis(demethoxy)curcumin (Curcumin III) is a natural demethoxy derivative of curcumin, with anti-inflammatory and anti-cancer activities. |
| Targets(IC50) | Apoptosis, Autophagy |
| In vivo | Bisdemethoxycurcumin (BDMC) is a minor constituent (approximately 3%) of curcuminoids that has been shown to be more stable than the other two main curcuminoids, that is, curcumin and demthoxycurcumin. BDMC has anti-tumor effects exerted through a multimechanistic mode of action involving inhibition of cell proliferation, invasion and migration, metastasis and tumour growth, and induction of apoptotic death in cancer cells[1]. |

Solubility Information

| | |
|---------------------|---|
| Solubility | DMSO: 31 mg/mL (100.54 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween-80+45% Saline: 2 mg/mL (6.49 mM), Sonication is recommended. <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 | 3.2433 mL | 16.2164 mL | 32.4328 mL |
| 5 mM | 0.6487 mL | 3.2433 mL | 6.4866 mL |
| 10 mM | 0.3243 mL | 1.6216 mL | 3.2433 mL |
| 50 mM | 0.0649 mL | 0.3243 mL | 0.6487 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

Ramezani M , Hatamipour M , Sahebkar A . Promising Anti-tumor properties of Bisdemethoxycurcumin: A Naturally Occurring Curcumin Analogue[J]. Journal of Cellular Physiology, 2017.

Jin Y, Chen X, Gao Z, et al. Bisdemethoxycurcumin alleviates vandetanib-induced cutaneous toxicity in vivo and in vitro through autophagy activation. Biomedicine & Pharmacotherapy. 2021, 144: 112297.

Meng, Fu, Shuilian, et al. Inhibitory effects of bisdemethoxycurcumin on mast cell-mediated allergic diseases.[J]. International immunopharmacology, 2018.

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