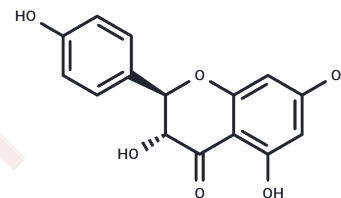


Dihydrokaempferol

Chemical Properties

CAS No. :	480-20-6
Formula:	C ₁₅ H ₁₂ O ₆
Molecular Weight:	288.25
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	Dihydrokaempferol (Aromadendrin) is a natural product. It induces apoptosis and inhibits Bcl-2 and Bcl-xL expression, possesses anti-inflammatory, antioxidant, and anti-diabetic properties, it exhibits anti-inflammatory activity
Targets(IC50)	Apoptosis, Bcl-2 Family
In vitro	Aromadendrin, a flavonol, has been reported to possess a variety of pharmacological activities such as anti-inflammatory, antioxidant, and anti-diabetic properties. Aromadendrin significantly suppressed LPS-induced excessive production of pro-inflammatory mediators such as nitric oxide (NO) and PGE ₂ . In accordance, aromadendrin attenuated LPS-induced overexpression iNOS and COX-2. In addition, aromadendrin significantly suppressed LPS-induced degradation of IκB, which sequesters NF-κB in cytoplasm, consequently inhibiting the nuclear translocation of pro-inflammatory transcription factor NF-κB. Aromadendrin significantly attenuated LPS-induced activation of JNK, but not ERK and p38, in a concentration-dependent manner. Aromadendrin exhibits anti-inflammatory activity through the suppression of nuclear translocation of NF-κB and phosphorylation of JNK in LPS-stimulated RAW 264.7 macrophage cells[2].

Solubility Information

Solubility	H ₂ O: < 0.1 mg/mL (insoluble), DMSO: 252.5 mg/mL (875.98 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: 4 mg/mL (13.88 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	3.4692 mL	17.3461 mL	34.6921 mL
5 mM	0.6938 mL	3.4692 mL	6.9384 mL
10 mM	0.3469 mL	1.7346 mL	3.4692 mL
50 mM	0.0694 mL	0.3469 mL	0.6938 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

Stimulation of glucose uptake and improvement of insulin resistance by aromadendrin. *Pharmacology*. 2011;88(5-6):266-74.

Lee J W , Kim N H , Kim J Y , et al. Aromadendrin Inhibits Lipopolysaccharide-Induced Nuclear Translocation of NF- κ B and Phosphorylation of JNK in RAW 264.7 Macrophage Cells[J]. *Biomolecules & Therapeutics*, 2013, 21(3):216-221.

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