

Brazilein

Chemical Properties

CAS No. : 600-76-0

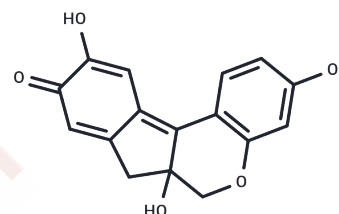
Formula: C₁₆H₁₂O₅

Molecular Weight: 284.26

Store at low temperature

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	Brazilein, a natural anti-inflammatory and antioxidant from <i>Caesalpinia sappan</i> L., inhibits adipocyte differentiation by inhibiting PPAR γ induction, inhibits the growth of skin cancer cells through increasing caspase-3 activity, and also possesses insecticidal activity.
Targets(IC50)	Apoptosis,Caspase,PPAR
In vitro	Brazilein at 1, 5, and 10 μ g/mL induces apoptosis in spleen lymphocytes after 72 hours in the presence of mitogens. [1] Brazilein at 1, 5, and 10 μ g/mL inhibits the proliferation of T and B lymphocytes induced by Con A and LPS in vitro after 72 hours, as measured by MTT assay. [1]
In vivo	Mice treated with Brazilein (50mg/kg, i.p.) once daily for 7 days experienced dose-dependent atrophy and weight loss of the thymus and spleen, with thymus/spleen-to-body-weight ratios significantly reduced compared to the control group. [1] In ICR mice, i.p. administration of Brazilein at 25 or 50mg/kg for 7 consecutive days, followed by SRBC immunization on day 8, significantly decreased splenic PFC numbers measured on day 12, indicating suppression of the humoral immune response. [1]

Solubility Information

Solubility	DMF: 8 mg/mL (28.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.5179 mL	17.5895 mL	35.1791 mL
5 mM	0.7036 mL	3.5179 mL	7.0358 mL
10 mM	0.3518 mL	1.759 mL	3.5179 mL
50 mM	0.0704 mL	0.3518 mL	0.7036 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

Ye M, Xie WD, Lei F, Meng Z, Zhao YN, Su H, Du LJ. Brazilein, an important immunosuppressive component from *Caesalpinia sappan* L. *Int Immunopharmacol*. 2006 Mar;6(3):426-32.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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