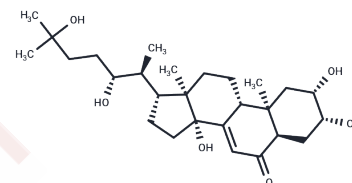


Ecdysone

Chemical Properties

CAS No. :	3604-87-3
Formula:	C ₂₇ H ₄₄ O ₆
Molecular Weight:	464.63
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	Ecdysone is a major steroid hormone in insects and herbs. Ecdysone triggers mineralocorticoid receptor activation and induces cellular apoptosis. Ecdysone signaling through Ecdysone receptor isoform B1 is required cell autonomously for the muscle death.
Targets(IC50)	Apoptosis,ATPase,Glucocorticoid Receptor,Endogenous Metabolite,Autophagy, Potassium Channel,Sodium Channel
In vitro	Ecdysone (10, 100 nM) induced the expression of a-smooth muscle actin (SMA). Ecdysone elevated the expression of cleaved caspase 3 in a dose dependent manner. Ecdysone (10, 100 nM) suppressed cell motility and scratch wound closure to a comparable extent[4]. Ecdysone (100 nM) induced a branched spindle mesenchymal-like cell shape. Ecdysone (100 nM) caused renal tubular inner medullary collecting duct cells apoptosis[4].
In vivo	In male C57BL/6 mice, Ecdysone (6 µg/g/day; s.c.) significantly impaired renal function, and BUN levels were statistically significantly increased, amplifying the renal expression of α-SMA. Ecdysone also displayed MR-dependent nephrotic effects[4].

Solubility Information

Solubility	DMSO: 60 mg/mL (129.14 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: 1 mg/mL (2.15 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	2.1523 mL	10.7613 mL	21.5225 mL
5 mM	0.4305 mL	2.1523 mL	4.3045 mL
10 mM	0.2152 mL	1.0761 mL	2.1523 mL
50 mM	0.043 mL	0.2152 mL	0.4305 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

Gautam NK, Verma P, Tapadia MG. Ecdysone regulates morphogenesis and function of Malpighian tubules in *Drosophila melanogaster* through EcR-B2 isoform. *Dev Biol.* 2015 Feb 15;398(2):163-76.

Nishita Y. Ecdysone response elements in the distal promoter of the *Bombyx* Broad-Complex gene, BmBR-C. *Insect Mol Biol.* 2014 Jun;23(3):341-56.

Minglei Lu, et al. Activation of Mineralocorticoid Receptor by Ecdysone, an Adaptogenic and Anabolic Ecdysteroid, Promotes Glomerular Injury and Proteinuria Involving Overactive GSK3 β Pathway Signaling. *Sci Rep.* 2018 Aug 15;8(1):12225.

Minglei Lu, et al. Ecdysone Elicits Chronic Renal Impairment via Mineralocorticoid-Like Pathogenic Activities. *Cell Physiol Biochem.* 2018;49(4):1633-1645.

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