

Desonide

Chemical Properties

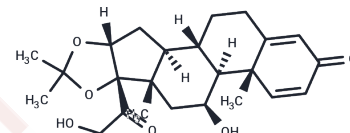
CAS No. : 638-94-8

Formula: C₂₄H₃₂O₆

Molecular Weight: 416.51

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	Desonide (Prednacinolone) is a synthetic glucocorticosteroid for topical use, with anti-inflammatory activity. Desonide binds to glucocorticoid receptors in the cytoplasm, and the ligand-receptor complex is translocated as a homodimer into the nucleus, where transcription activation via glucocorticoid response elements within glucocorticoid-responsive genes occur. This agent induces transcription of genes coding for anti-inflammatory proteins, including lipocortin-1, interleukin-10, interleukin-1 receptor antagonist and neutral endopeptidase. Increased synthesis of lipocortin-1 has an inhibitory effect on phospholipase A ₂ , which in turn inhibits the release of arachidonic acid, thereby controlling the biosynthesis of potent mediators of inflammation such as prostaglandins and leukotrienes.
Targets(IC ₅₀)	Apoptosis,Glucocorticoid Receptor,Huntingtin

Solubility Information

Solubility	H ₂ O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 28 mg/mL (67.23 mM),Sonication is recommended. DMSO: 55 mg/mL (132.05 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: 2.5 mg/mL (6 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	2.4009 mL	12.0045 mL	24.009 mL
5 mM	0.4802 mL	2.4009 mL	4.8018 mL
10 mM	0.2401 mL	1.2005 mL	2.4009 mL
50 mM	0.048 mL	0.2401 mL	0.4802 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

Russell GM, et al. J Neurosci. 2010 Apr 28;30(17):6106-15.

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