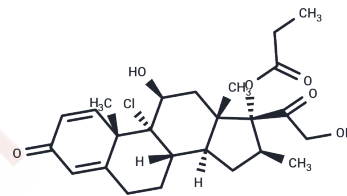


Beclomethasone 17-propionate

Chemical Properties

CAS No. :	5534-18-9
Formula:	C ₂₅ H ₃₃ ClO ₆
Molecular Weight:	464.98
Storage:	Store at low temperature, Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Beclomethasone 17-propionate is a glucocorticoid that is the active metabolite of Beclomethasone dipropionate (BDP). As a glucocorticoid receptor (GR) agonist, 17-BMP has a 13-fold higher affinity than BDP and inhibits the production of pro-inflammatory cytokines, such as CXCL8, TNF- α , and IL-6, thus exerting an anti-inflammatory effect, and it is mainly used in the treatment of asthma and allergic rhinitis.
Targets(IC50)	Glucocorticoid Receptor, Drug Metabolite
In vitro	Beclomethasone 17-propionate has EC ₅₀ values of 0.05 nM, 0.01 nM, and 0.1 nM for IL-6, TNF α , and CXCL8, respectively. [3]

Solubility Information

Solubility	DMSO: 100 mg/mL (215.06 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (7.1 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	2.1506 mL	10.7532 mL	21.5063 mL
5 mM	0.4301 mL	2.1506 mL	4.3013 mL
10 mM	0.2151 mL	1.0753 mL	2.1506 mL
50 mM	0.043 mL	0.2151 mL	0.4301 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

Würthwein G, et al. Activation of beclomethasone dipropionate by hydrolysis to beclomethasone-17-monopropionate. *Biopharm Drug Dispos.* 1990 Jul;11(5):381-94.

Roberts JK, et al. Metabolism of beclomethasone dipropionate by cytochrome P450 3A enzymes. *J Pharmacol Exp Ther.* 2013 May;345(2):308-16.

Plumb J, et al. Evaluation of glucocorticoid receptor function in COPD lung macrophages using beclomethasone-17-monopropionate. *PLoS One.* 2013 May 21;8(5):e64257.

Sobczak M, et al. Does Vitamin D Work Synergistically with Anti-Asthmatic Drugs in Airway Remodeling? *Int J Mol Sci.* 2022 Oct 24;23(21):12798.

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