

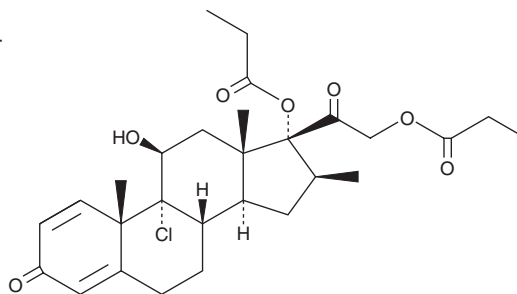
# PRODUCT INFORMATION



## Beclomethasone Dipropionate

Item No. 38880

**CAS Registry No.:** 5534-09-8  
**Formal Name:** 9-chloro-11 $\beta$ -hydroxy-16 $\beta$ -methyl-17,21-bis(1-oxopropoxy)-pregna-1,4-diene-3,20-dione  
**Synonyms:** BC-DP, BDP, Beclomethasone 17,21-dipropionate  
**MF:** C<sub>28</sub>H<sub>37</sub>ClO<sub>7</sub>  
**FW:** 521.0  
**Purity:**  $\geq$ 98%  
**UV/Vis.:**  $\lambda_{\text{max}}$ : 240 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Beclomethasone dipropionate is supplied as a solid. A stock solution may be made by dissolving the beclomethasone dipropionate in the solvent of choice, which should be purged with an inert gas. Beclomethasone dipropionate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of beclomethasone dipropionate in these solvents is approximately 10 mg/ml.

### Description

Beclomethasone dipropionate is a glucocorticoid receptor agonist and prodrug form of beclomethasone 17-propionate (Item No. 38884).<sup>1,2</sup> Beclomethasone dipropionate is converted to beclomethasone 17-propionate or beclomethasone 21-propionate *via* esterases, which are subsequently hydrolyzed to beclomethasone (Item No. 33196).<sup>1</sup> It binds to the glucocorticoid receptor (IC<sub>50</sub> = 2.4 nM) and inhibits glucocorticoid receptor transrepression induced by phorbol 12-myristate 13-acetate (PMA; Item No. 10008014), as well as induces transactivation of the glucocorticoid receptor, in CV-1 cells expressing the human receptor.<sup>2</sup> Formulations containing beclomethasone dipropionate have been used in the treatment of asthma.

### References

1. Roberts, J.K., Moore, C.D., Ward, R.M., *et al.* Metabolism of beclomethasone dipropionate by cytochrome P450 3A enzymes. *J. Pharmacol. Exp. Ther.* **345**(2), 308-316 (2013).
2. Tanigawa, K., Nagase, H., Ohmori, K., *et al.* Species-specific differences in the glucocorticoid receptor transactivation function upon binding with betamethasone-esters. *Int. Immunopharmacol.* **2**(7), 941-950 (2002).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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