

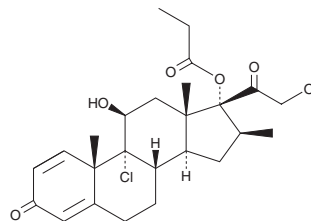
# PRODUCT INFORMATION



## Beclomethasone 17-Propionate

Item No. 38884

**CAS Registry No.:** 5534-18-9  
**Formal Name:** (11 $\beta$ ,16 $\beta$ )-9-chloro-11,21-dihydroxy-16-methyl-17-(1-oxopropoxy)-pregna-1,4-diene-3,20-dione  
**Synonyms:** Beclometasone 17-Propionate, Beclomethasone 17-Monopropionate, 17-BMP  
**MF:** C<sub>25</sub>H<sub>33</sub>ClO<sub>6</sub>  
**FW:** 465.0  
**Purity:**  $\geq$ 95%  
**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 17-propionate is supplied as a solid. A stock solution may be made by dissolving the beclomethasone 17-propionate in the solvent of choice, which should be purged with an inert gas. Beclomethasone 17-propionate is soluble in methanol.

### Description

Beclomethasone 17-propionate is a glucocorticoid receptor agonist and an active metabolite of the glucocorticoid prodrug beclomethasone dipropionate (Item No. 38880).<sup>1,2</sup> It is formed from beclomethasone dipropionate *via* esterases and is subsequently hydrolyzed to beclomethasone (Item No. 33196).<sup>2</sup> Beclomethasone 17-propionate binds to the glucocorticoid receptor (IC<sub>50</sub> = 3 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 in a concentration-dependent manner.<sup>1</sup> It inhibits LPS-induced increases in IL-6, IL-8, and TNF- $\alpha$  levels in primary human lung macrophages from patients with chronic obstructive pulmonary disease (COPD; IC<sub>50</sub>s = 0.36, 2.04, and 0.21 nM, respectively).<sup>3</sup>

### References

1. 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).
2. 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).
3. Plumb, J., Robinson, L., Lea, S., *et al.* Evaluation of glucocorticoid receptor function in COPD lung macrophages using beclomethasone-17-monopropionate. *PLoS One* **8(5)**, e64257 (2013).

#### 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.

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