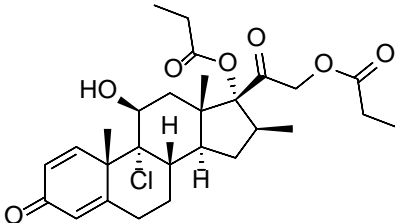


# Product data sheet



MedKoo Cat#: 315215 Name: Beclomethasone dipropionate CAS#: 5534-09-8 Chemical Formula: C <sub>28</sub> H <sub>37</sub> ClO <sub>7</sub> Exact Mass: 520.2228 Molecular Weight: 521.04	
Product supplied as: Powder	
Purity (by HPLC): ≥ 98%	
Shipping conditions: Ambient temperature	
Storage conditions: Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

## 1. Product description:

Beclomethasone dipropionate (INN modified) or beclomethasone dipropionate (USAN, former BAN), also referred to as beclomethasone (INN), is a potent glucocorticoid steroid. In the form of an inhaler (e.g. Clenil, Qvar), a wide number of brands of which are available, it is used for the prophylaxis of asthma. As a nasal spray (e.g. Beconase, alanas, Vancenase), it is used for the treatment of rhinitis (e.g. hayfever) and sinusitis. In some instances it is used by oral pathologists in the treatment of unusually severe aphthous ulcers.

## 2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

## 3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	107.0	205.36
Ethanol	18.0	34.55

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.92 mL	9.60 mL	19.19 mL
5 mM	0.38 mL	1.92 mL	3.84 mL
10 mM	0.19 mL	0.96 mL	1.92 mL
50 mM	0.04 mL	0.19 mL	0.38 mL

## 5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

## 6. Recommended literature which reported protocols for in vitro and in vivo study

### In vitro study

1. Caronzolo D, Lucini V, Pannacci M, Grosso S, Colleoni F, Frascini F, Scaglione F. Glucocorticoids increase in vitro and in vivo activities of antibiotics against *Chlamydomydia pneumoniae*. *Antimicrob Agents Chemother.* 2004 Dec;48(12):4878-81. doi: 10.1128/AAC.48.12.4878-4881.2004. PMID: 15561871; PMCID: PMC529217.

### In vivo study

1. Caronzolo D, Lucini V, Pannacci M, Grosso S, Colleoni F, Frascini F, Scaglione F. Glucocorticoids increase in vitro and in vivo activities of antibiotics against *Chlamydomydia pneumoniae*. *Antimicrob Agents Chemother.* 2004 Dec;48(12):4878-81. doi: 10.1128/AAC.48.12.4878-4881.2004. PMID: 15561871; PMCID: PMC529217.

## 7. Bioactivity

Biological target: Betamethasone dipropionate is a glucocorticoid steroid with anti-inflammatory and immunosuppressive abilities.

# Product data sheet



## In vitro activity

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The effects of dexamethasone (Dex) and beclomethasone (Becl) on *C. pneumoniae* infection in vitro were evaluated. Glucocorticoids were tested alone or in combination with azithromycin (AZM), telithromycin (TEL), or levofloxacin (LVX), antibiotics commonly used against *C. pneumoniae* infections. In vitro at 1 and 5  $\mu\text{M}$ , both glucocorticoids decreased the number of IFU (inclusion forming units) versus the control number ( $P < 0.001$ ). Dex and Becl reduced the number of IFU versus the control number by about 25% at 1  $\mu\text{M}$  and by about 40 and 30%, respectively, at 5  $\mu\text{M}$ .

Reference: Antimicrob Agents Chemother. 2004 Dec;48(12):4878-81. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC529217/>

## In vivo activity

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The in vivo antichlamydial activities of dexamethasone and beclomethasone alone and in combination with an antibiotic were tested. An in vivo dose of Dex and Becl (120  $\mu\text{g}/\text{kg}/\text{day}$ ) led to an anti-inflammatory effect and an immunosuppressant effect in a murine *Chlamydomphila pneumoniae* infection model.

Reference: Antimicrob Agents Chemother. 2004 Dec;48(12):4878-81. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC529217/>

*Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.*