# PRODUCT INFORMATION



## Alclometasone Dipropionate

Item No. 23901

CAS Registry No.: 66734-13-2

Formal Name: 7α-chloro-11β-hydroxy-16α-methyl-

17,21-bis(1-oxopropoxy)-pregna-1,4-

diene-3,20-dione

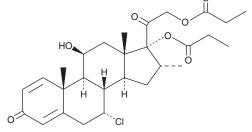
Synonyms: ACM, Alclometasone

17,21-Dipropionate, SCH 22219

 $C_{28}H_{37}CIO_7$ MF: FW: 521.0 **Purity:** ≥98% UV/Vis.:  $\lambda_{max}$ : 244 nm A crystalline solid Supplied as:

-20°C Storage: ≥4 years Stability:

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



## **Laboratory Procedures**

Alclometasone dipropionate (ACM) is supplied as a crystalline solid. A stock solution may be made by dissolving the ACM in the solvent of choice. ACM is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of ACM in these solvents is approximately 30 mg/ml.

ACM is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ACM should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. ACM has a solubility of approximately 0.2 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

ACM is a corticosteroid.<sup>1</sup> It reduces cutaneous anaphylaxis reactions induced by tuberculin or albumin in mice when administered topically (20 µl of a 0.1% solution). ACM also inhibits androgen-dependent cytochrome P450 activity and the O-depropylation activity of 7-alkoxy-coumarin O-dealkylase in a dosedependent manner in male rats but has no effect on hepatic drug metabolism in female rats or mice of both sexes.<sup>2</sup> Formulations containing ACM have been used to treat radiation and allergic contact dermatitis.

#### References

- 1. Sengoku, T., Morita, K., Sakuma, S., et al. Possible inhibitory mechanism of FK506 (tacrolimus hydrate) ointment for atopic dermatitis based on animal models. Eur. J. Pharmacol. 379(2-3), 183-189 (1999).
- 2. Nishibe, Y., Hamataka, M., Hasegawa, T., et al. Species and sex differences in the inhibitory action of the corticosteroid alclometasone dipropionate on the hepatic drug-metabolizing system. Japan J. Pharmacol. 50(4), 435-443 (1989).

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

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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