PRODUCT INFORMATION



Triamcinolone acetonide

Item No. 18026

CAS Registry No.: 76-25-5

Formal Name: 9-fluoro-11β,21-dihydroxy-16α,17-

[(1-methylethylidene)bis(oxy)]-pregna-

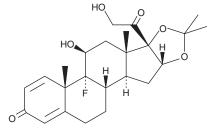
1,4-diene-3,20-dione

Synonyms: NSC 21916, TrA MF: C₂₄H₃₁FO₆ FW: 434.5 **Purity:** ≥98%

UV/Vis.: λ_{max} : 240 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

Triamcinolone acetonide is supplied as a crystalline solid. A stock solution may be made by dissolving the triamcinolone acetonide in the solvent of choice, which should be purged with an inert gas. Triamcinolone acetonide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of triamcinolone acetonide in ethanol is approximately 5 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Triamcinolone acetonide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, triamcinolone acetonide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Triamcinolone acetonide has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Triamcinolone acetonide is a synthetic corticosteroid.¹ It decreases cytokine levels, the firing rate of sensory neurons, and mechanical hypersensitivity in a rat spinal nerve ligation model when used at a dose of 1.5 mg/kg prior to and following surgery for three days. Triamcinolone acetonide also decreases outflow facility in a mouse model of steroid-induced glaucoma when 20 μl of a 40 mg/ml suspension is administered subconjunctivally.² Formulations containing triamcinolone acetonide are used in the treatment of diabetic macular edema.

References

- 1. Li, H., Xie, W., Strong, J.A., et al. Systemic antiinflammatory corticosteroid reduces mechanical pain behavior, sympathetic sprouting, and elevation of proinflammatory cytokines in a rat model of neuropathic pain. Anesthesiology 107(3), 469-477 (2007).
- 2. Kumar, S., Shah, S., Deutsch, E.R., et al. Triamcinolone acetonide decreases outflow facility in C57BL/6 mouse eyes. Invest. Ophthalmol. Vis. Sci. 54(2), 1280-1287 (2013).

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.

WARRANTY AND LIMITATION OF REMEDY

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