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
Synonym: NSC 21916
MF: C24H31FO6
FW: 434.5
Purity: ≥ 98%
UV/Vis.: \( \lambda_{\text{max}} \approx 240 \text{ nm} \)
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥ 2 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. Triamcinolone acetonide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. 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

