# PRODUCT INFORMATION



## Isoflupredone

Item No. 35376

CAS Registry No.: 338-95-4

Formal Name: 9-fluoro-11β,17,21-trihydroxy-pregna-1,4-

diene-3,20-dione

Synonyms: Δ-Fluorocortisone, 9α-Fluoroprednisolone,

NSC 12174

≥4 years

MF: C21H27FO5 FW: 378.4 **Purity:** ≥95% UV/Vis.:  $\lambda_{max}$ : 239 nm Supplied as: A solid -20°C Storage:

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

#### **Laboratory Procedures**

Isoflupredone is supplied as a solid. A stock solution may be made by dissolving the isoflupredone in the solvent of choice, which should be purged with an inert gas. Isoflupredone is slightly soluble in ethyl acetate and DMSO.

#### Description

Stability:

Isoflupredone is an agonist of glucocorticoid and mineralocorticoid receptors (EC $_{50}$ s = 0.877 and 0.007 nM, respectively, in transactivation assays). It inhibits LPS-induced nitric oxide (NO) production in RAW 264.7 macrophages (IC<sub>50</sub> = 25.5 nM).<sup>2</sup> Topical application of a solution containing isoflupredone inhibits croton oil-induced ear edema in rats ( $ED_{50} = 51.9$  nM). Isoflupredone (0.6 mg/day) increases mean arterial pressure (MAP) and decreases the levels of potassium and sodium in the plasma and urine, respectively, in sheep.3 It reduces tumor levels of uridine incorporation into 18S and 28S rRNA in a P1798 murine lymphoma model when administered at a dose of 25 mg/kg.<sup>4</sup>

## References

- 1. Grossmann, C., Scholz, T., Rochel, M., et al. Transactivation via the human glucocorticoid and mineralocorticoid receptor by therapeutically used steroids in CV-1 cells: A comparison of their glucocorticoid and mineralocorticoid properties. Eur. J. Endocrinol. 151(3), 397-406 (2004).
- 2. Park, K.-K., Ko, D.-H., You, Z., et al. Synthesis and pharmacological evaluations of new steroidal anti-inflammatory antedrugs: 9α-Fluoro-11β,17α,21-trihydroxy-3,20-dioxo-pregna-1,4-diene-16αcarboxylate (FP16CM) and its derivatives. Steroids 71(1), 83-89 (2006).
- Coghlan, J.P., Denton, D.A., Mills, E.H., et al. Steroid antagonism of the 'hypertensinogenic' activity of 9α-fluoroprednisolone. Life Sci. 35(26), 2609-2612 (1984).
- 4. Stevens, J., Mashburn, L.T., and Hollander, V.P. Effect of 9α-fluoroprednisolone and ι-asparaginase on uridine incorporation into ribosomal RNA of P1798 lymphosarcoma. Biochim. Biophys. Acta 186(2), 332-339 (1969).

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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