# PRODUCT INFORMATION



# 21-desacetyl Deflazacort

Item No. 20316

CAS Registry No.: 13649-57-5

Formal Name: 11β,21-dihydroxy-2'-methyl-5'H-pregna-

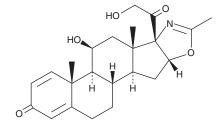
1,4-dieno[17,16β-d]oxazole-3,20-dione

Synonym: MF: C<sub>23</sub>H<sub>29</sub>NO<sub>5</sub> 399.5 FW: **Purity:** ≥98%

UV/Vis.:  $\lambda_{\text{max}}$ : 242 nm Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

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



### **Laboratory Procedures**

21-desacetyl Deflazacort is supplied as a crystalline solid. A stock solution may be made by dissolving the 21-desacetyl deflazacort in the solvent of choice, which should be purged with an inert gas. 21-desacetyl Deflazacort is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 21-desacetyl deflazacort in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

21-desacetyl Deflazacort is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 21-desacetyl deflazacort should first be dissolved in DMSO and then diluted with the aqueous buffer of choice, 21-desacetyl Deflazacort has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

21-desacetyl Deflazacort is the active glucocorticoid derived from the prodrug deflazacort (Item No. 20386). 21-desacetyl Deflazacort and related glucocorticoids have anti-inflammatory and immunosuppressant effects, as well as benefits in certain muscular dystrophies. 1-3

#### References

- 1. Canonica, G.W., Ciprandi, G., Passalacqua, G., et al. Molecular events in allergic inflammation: Experimental models and possible modulation. Allergy 52(suppl 34), 25-30 (1997).
- Czaja, A.J. Promising pharmacological, molecular and cellular treatments of autoimmune hepatitis. Curr. Pharm. Des. 17(29), 3120-3140 (2011).
- 3. Matthews, E., Brassington, R., Kuntzer, T., et al. Corticosteroids for the treatment of Duchenne muscular dystrophy. Cochrane Database Syst. Rev. 5, CD003725 (2016).

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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