# **Product** Data Sheet

## **Deflazacort**

Cat. No.: HY-13609 CAS No.: 14484-47-0 Molecular Formula:  $C_{25}H_{31}NO_{6}$ Molecular Weight: 441.52

Target: **Glucocorticoid Receptor** 

Pathway: Immunology/Inflammation; Vitamin D Related/Nuclear Receptor

-20°C Storage: Powder 3 years

In solvent

4°C 2 years -80°C 2 years

-20°C 1 year

#### **SOLVENT & SOLUBILITY**

In Vitro DMSO: ≥ 100 mg/mL (226.49 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.2649 mL	11.3245 mL	22.6490 mL
	5 mM	0.4530 mL	2.2649 mL	4.5298 mL
	10 mM	0.2265 mL	1.1325 mL	2.2649 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

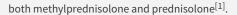
- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.66 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.66 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.66 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description Deflazacort, a glucocorticoid, is an inactive proagent and is converted rapidly to the active metabolite 21desacetyldeflazacort. Deflazacort is used as an anti-inflammatory and immunosuppressant<sup>[1]</sup>.

In Vitro

Deflazacort is an inactive prodrug which is converted rapidly to the active metabolite 21-desacetyldeflazacort. Maximum concentrations of 21-desacetyldeflazacort averaged 116 ng/ml and were observed after 1.3 h. The average area under the curve was 280 ng/ml.h, and the terminal half-life was 1.3 h. 21-Desacetyldeflazacort was cleared significantly faster than



MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **REFERENCES**

[1]. Mollmann, H., et al., Pharmacokinetic/pharmacodynamic evaluation of deflazacort in comparison to methylprednisolone and prednisolone. Pharmaceutical research, 1995. 12(7): p. 1096-1100.

Caution: Product has not been fully validated for medical applications. For research use only.

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