

# **Data Sheet**

Product Name: Deflazacort

Cat. No.: CS-2349

CAS No.: 14484-47-0

Molecular Formula: C25H31NO6

Molecular Weight: 441.52

Target: Glucocorticoid Receptor

Pathway: GPCR/G Protein

Solubility: DMSO :  $\geq$  100 mg/mL (226.49 mM)

### **BIOLOGICAL ACTIVITY:**

Deflazacort is a glucocorticoid used as an anti-inflammatory and immunosuppressant. Target: Glucocorticoid Receptor 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 both methylprednisolone and prednisolone [1]. Two of 40 boys treated with deflazacort died at 13 and 18 years of age from cardiac failure. The treated boys were significantly shorter, did not have excessive weight gain and 22 of 40 had asymptomatic cataracts. Deflazacort has a very significant impact on health, quality of life and health care costs for boys with DMD and their families, and is associated with few side effects [2].

#### 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.

[2]. Biggar, W., et al., Long-term benefits of deflazacort treatment for boys with Duchenne muscular dystrophy in their second decade. Neuromuscular Disorders, 2006. 16(4): p. 249-255.

## **CAIndexNames:**

5'H-Pregna-1,4-dieno[17,16-d]oxazole-3,20-dione, 21-(acetyloxy)-11-hydroxy-2'-methyl-, (11β,16β)-

#### **SMILES:**

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

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