PRODUCT INFORMATION

Deflazacort
Item No. 20386

CAS Registry No.: 14484-47-0
Formal Name: 21-(acetyloxy)-11β-hydroxy-2'-methyl-5'H-pregna-1,4-dieno[17,16β-d]oxazole-3,20-dione
Synonyms: DL-458IT, L-5,458, MDL 458
MF: C_{25}H_{31}NO_{6}
FW: 441.5
Purity: ≥98%
UV/Vis.: λ_{max}: 242 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

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

Deflazacort is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, deflazacort should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 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

Deflazacort is a prodrug for the active glucocorticoid 21-desacetyl deflazacort (Item No. 20316). Deflazacort and related glucocorticoids have anti-inflammatory and immunosuppressant effects, as well as benefits in certain muscular dystrophies.¹⁻³

References