6β-hydroxy Dexamethasone
Item No. 22099

CAS Registry No.: 55879-47-5
Formal Name: 9-fluoro-6β,11β,17,21-tetrahydroxy-16α-methyl-pregn-1,4-diene-3,20-dione
MF: C_{22}H_{29}FO_{6}
FW: 408.5
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

6β-hydroxy Dexamethasone is supplied as a solid. A stock solution may be made by dissolving the 6β-hydroxy dexamethasone in the solvent of choice. 6β-hydroxy Dexamethasone is slightly soluble in methanol.

Description

6β-hydroxy Dexamethasone is a metabolite of dexamethasone (Item Nos. 11015 | 20340) that is more hydrophilic than the parent compound.1 Dexamethasone is metabolized by CYP3A4; therefore, quantification of the dexamethasone metabolites, 6α- and 6β-hydroxy dexamethasone, can be used to determine CYP3A4 enzyme activity in humans.2,3 The formation of 6-hydroxy dexamethasone metabolites is species-specific, with hamsters producing the highest amount.4 In rats, dexamethasone hydroxylation is sex-specific, with male rats producing metabolites in similar ratios to humans and female rats producing fewer hydroxylated metabolites than male rats.

References