PRODUCT INFORMATION

18-hydroxy-11-deoxy Corticosterone
Item No. 10007851

CAS Registry No.: 379-68-0
Formal Name: 18,21-dihydroxy-pregn-4-ene-3,20-dione
Synonyms: 18-Hydroxydeoxycorticosterone, 18-OH-DOC
MF: C_{21}H_{30}O_{4}
FW: 346.5
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

18-hydroxy-11-deoxy Corticosterone (18-OH-DOC) is supplied as a solid. A stock solution may be made by dissolving the 18-OH-DOC in the solvent of choice. 18-OH-DOC is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of 18-OH-DOC in these solvents is approximately 25 mg/ml.

Description

18-OH-DOC is a mineralocorticoid secreted by the zona fasciculata of the adrenal gland.\(^1,2\) Its biosynthesis is regulated by adrenocorticotropic hormone (ACTH; Item No. 24257) as well as angiotensin II (Item No. 17150), which increases 18-OH-DOC production in isolated human adrenal glomerulosa cells.\(^1,3\) 18-OH-DOC can be formed via conversion of 11-deoxy corticosterone (DOC; Item No. 22916) in human SK-MEL188 melanoma cells.\(^4\) 18-OH-DOC is an intermediate in the metabolism of progesterone (Item No. 15876) and can be converted to aldosterone (Item No. 15273) by the capsular portion of rat adrenal glands.\(^3,4\) Continuous infusion of 18-OH-DOC (200 μg/rat per day) increases systolic blood pressure in uninephrectomized saline-drinking rats.\(^2\) Plasma levels of 18-OH-DOC are elevated in a db/db mouse model of type 2 diabetes.\(^5\)

References