PRODUCT INFORMATION



Deoxycorticosterone Acetate

Item No. 30856

CAS Registry No.: 56-47-3

Formal Name: 21-(acetyloxy)-pregn-4-ene-3,20-dione

Synonym: **DOCA** MF: $C_{23}H_{32}O_4$ FW: 372.5 **Purity:** ≥95% UV/Vis.: λ_{max} : 240 nm Supplied as: A solid

Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

Deoxycorticosterone acetate is supplied as a solid. A stock solution may be made by dissolving the deoxycorticosterone acetate in the solvent of choice, which should be purged with an inert gas. Deoxycorticosterone acetate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of deoxycorticosterone acetate in these solvents is approximately 1, 2, and 10 mg/ml, respectively.

Deoxycorticosterone acetate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, deoxycorticosterone acetate should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Deoxycorticosterone acetate has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Deoxycorticosterone acetate (DOCA) is a corticosteroid. It is an acetylated form of deoxycorticosterone (11-deoxy corticosterone; Item No. 22916). DOCA, in combination with saline via the drinking water, has commonly been used in rodents as a model of salt-sensitive hypertension, characterized by increases in sympathetic nervous system activity, imbalances in the renin-angiotensin system (RAS), and cardiac remodeling.2,3

References

- 1. Vinson, G.P. The mislabelling of deoxycorticosterone: Making sense of corticosteroid structure and function. J. Endocrinol. 211(1), 3-16 (2011).
- 2. Basting, T. and Lazartigues, E. DOCA-salt hypertension: An update. Curr. Hypertens. Rep. 19(4), 32 (2017).
- 3. Lee, L.-K., Kim, M.-Y., Kim, J.-H., et al. A review of deoxycorticosterone acetate-salt hypertension and its relevance for cardiovascular physiotherapy research. J. Phys. Ther. Sci. 27(1), 303-307 (2015).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM