

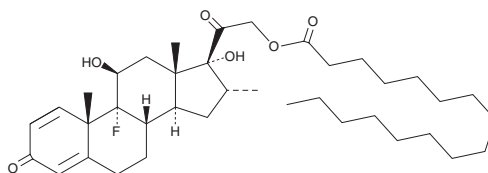
PRODUCT INFORMATION



Dexamethasone Palmitate

Item No. 35451

CAS Registry No.: 14899-36-6
Formal Name: 9-fluoro-11 β ,17-dihydroxy-16 α -methyl-21-[(1-oxohexadecyl)oxy]-pregna-1,4-diene-3,20-dione
Synonyms: Dexamethasone 21-palmitate, DXP, Limethason
MF: C₃₈H₅₉FO₆
FW: 630.9
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 239 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

Dexamethasone palmitate is supplied as a solid. A stock solution may be made by dissolving the dexamethasone palmitate in the solvent of choice, which should be purged with an inert gas. Dexamethasone palmitate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of dexamethasone palmitate in these solvents is approximately 16, 10, and 20 mg/ml, respectively.

Description

Dexamethasone palmitate is a prodrug form of the synthetic glucocorticoid dexamethasone (Item No. 11015).¹ It binds to the glucocorticoid receptor.² Dexamethasone palmitate-containing lipid nanoparticles reduce LPS-induced increases in cytokine levels in RAW 264.7 macrophages when used at a concentration of 100 $\mu\text{g/ml}$.³ Dexamethasone palmitate reduces paw inflammation and edema in a mouse model of collagen-induced rheumatoid arthritis when administered at a dose of 1 mg/kg. Intravitreal injection of a dexamethasone palmitate (1,280 $\mu\text{g/animal}$) emulsion inhibits vascular hyperpermeability induced by VEGF for up to nine months in rabbits.¹

References

1. Daull, P., Paterson, C.A., Kuppermann, B.D., *et al.* A preliminary evaluation of dexamethasone palmitate emulsion: A novel intravitreal sustained delivery of corticosteroid for treatment of macular edema. *J. Ocul. Pharmacol. Ther.* **29**(2), 258-269 (2013).
2. Rosseau, G.G., Kirchhoff, J., Formstecher, P., *et al.* 17 β -carboxamide steroids are a new class of glucocorticoid antagonists. *Nature* **279**(5709), 158-160 (1979).
3. Lorscheider, M., Tsapis, N., ur-Rehman, M., *et al.* Dexamethasone palmitate nanoparticles: An efficient treatment for rheumatoid arthritis. *J. Control. Release* **296**, 179-189 (2019).

WARNING

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

SAFETY DATA

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/02/2022

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