

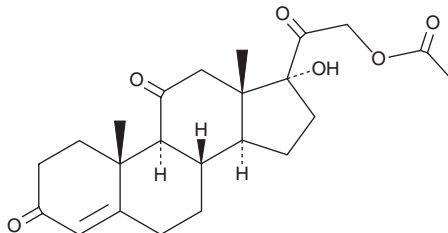
PRODUCT INFORMATION



Cortisone Acetate

Item No. 23798

CAS Registry No.: 50-04-4
Formal Name: 21-(acetyloxy)-17-hydroxy-pregn-4-ene-3,11,20-trione
Synonyms: Cortisone 21-acetate, NSC 49420
MF: C₂₃H₃₀O₆
FW: 402.5
Purity: ≥98%
UV/Vis.: λ_{max}: 238 nm
Supplied as: A crystalline 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

Cortisone acetate is supplied as a crystalline solid. A stock solution may be made by dissolving the cortisone acetate in the solvent of choice. Cortisone acetate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of cortisone acetate in these solvents is approximately 2, 20, and 30 mg/ml, respectively.

Cortisone acetate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, cortisone acetate should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Cortisone acetate has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Cortisone acetate is a synthetic glucocorticoid with anti-inflammatory properties.¹ It decreases the size of Bacillus Calmette-Guérin (BCG) vaccine-induced dermal lesions and tuberculin reactions in rabbits when administered at 2 mg/kg on alternate days over the course of 46 days. It also reduces the number and percentage of activated lesion-infiltrating mononuclear cells and decreases the amount of caseous necrosis and ulceration. Cortisone acetate (2.5 mg/kg per day, s.c.) slows tissue regeneration in a rabbit model of wound healing.² It also decreases the number of dexamethasone binding sites on isolated human lymphocytes by 30%.³ Formulations containing cortisone acetate have been used to relieve inflammation, pruritic manifestations of corticosteroid-responsive dermatoses, and in the treatment of immune and allergic disorders.

References

1. McCue, R.E., Dannenberg, A.M., Jr., Huguchi, S., *et al.* The effect of cortisone on the accumulation, activation, and necrosis of macrophages in tuberculous lesions. *Inflammation* **3(2)**, 159-176 (1978).
2. Joseph, J. and Tydd, M. The effects of cortisone acetate on tissue regeneration in the rabbit's ear. *J. Anat.* **115(Pt. 3)**, 445-460 (1973).
3. Schlechte, J.A., Ginsberg, B.H., and Sherman, B.M. Regulation of the glucocorticoid receptor in human lymphocytes. *J. Steroid Biochem.* **16(1)**, 69-74 (1982).

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, 12/19/2022

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