

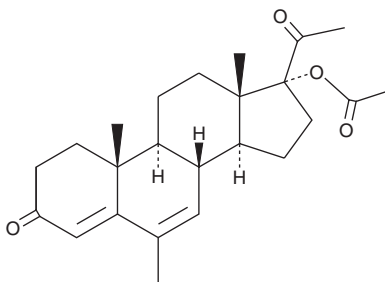
PRODUCT INFORMATION



Megestryl Acetate

Item No. 21749

CAS Registry No.: 595-33-5
Formal Name: 17-(acetyloxy)-6-methyl-pregna-4,6-diene-3,20-dione
Synonyms: Megestrol Acetate, NSC 71423, SC-10363
MF: C₂₄H₃₂O₄
FW: 384.5
Purity: ≥98%
UV/Vis.: λ_{max}: 288 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

Megestryl acetate is supplied as a crystalline solid. A stock solution may be made by dissolving the megestryl acetate in the solvent of choice. Megestryl acetate is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas.

Description

Megestryl acetate is a synthetic progestogen and derivative of progesterone (Item No. 15876) originally developed as a contraceptive.¹ It binds with high relative affinity to the progesterone, androgen, and glucocorticoid receptors in mammary cancer cells.² It increases neuropeptide Y (Item No. 15071) by 90-140% and inhibits calcium channel currents in the rat hypothalamus.^{3,4} Megestryl acetate decreases cytokine and serotonin production in patient-derived peripheral blood mononuclear cells (PBMCs).⁵ In rats, it increases food and water intake when administered at a dose of 50 mg/kg per day.³ Formulations containing megestryl acetate have been used in the treatment of endometriosis, hormone-related cancers, and as an appetite stimulant for cancer patients with anorexia and cachexia.⁶

References

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3. McCarthy, H.D., Crowder, R.E., Dryden, S., *et al.* Megestrol acetate stimulates food and water intake in the rat: Effects on regional hypothalamic neuropeptide Y concentrations. *Eur. J. Pharmacol.* **265(1-2)**, 99-102 (1994).
4. Costa, A.-M., Spence, K.T., Plata-Salamán, C.R., *et al.* Residual Ca²⁺ channel current modulation by megestrol acetate via a G-protein α_s-subunit in rat hypothalamic neurones. *J. Physiol.* **487(Pt 2)**, 291-303 (1995).
5. Mantovani, G., Macciò, A., Esu, S., *et al.* Medroxyprogesterone acetate reduces the *in vitro* production of cytokines and serotonin involved in anorexia/cachexia and emesis by peripheral blood mononuclear cells of cancer patients. *Eur. J. Cancer* **33(4)**, 602-607 (1997).
6. Argilés, J.M., Anguera, A., and Stemmler, B. A new look at an old drug for the treatment of cancer cachexia: Megestrol acetate. *Clin. Nutr.* **32(3)**, 319-324 (2013).

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.

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