

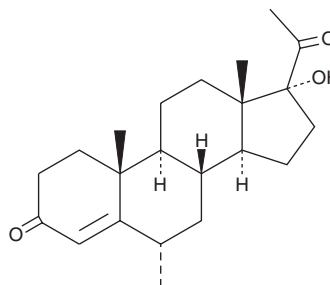
PRODUCT INFORMATION



Medroxyprogesterone

Item No. 24908

CAS Registry No.: 520-85-4
Formal Name: 17-hydroxy-6 α -methyl-pregn-4-ene-3,20-dione
Synonym: NSC 27408
MF: C₂₂H₃₂O₃
FW: 344.5
Purity: \geq 98%
UV/Vis.: λ_{max} : 240 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

Medroxyprogesterone is supplied as a crystalline solid. A stock solution may be made by dissolving the medroxyprogesterone in the solvent of choice. Medroxyprogesterone is soluble in organic solvents such as ethanol, methanol, and acetonitrile, which should be purged with an inert gas. The solubility of medroxyprogesterone in these solvents is approximately 1 mg/ml.

Description

Medroxyprogesterone is a progesterone receptor agonist ($K_i = 241$ nM) and a metabolite of medroxyprogesterone 17-acetate (Item No. 23664).¹⁻³ It induces a conformational change in the C-terminal domain of the progesterone receptor ($EC_{50} = 47.3$ nM) and increases alkaline phosphatase activity in T47D breast cancer cells ($EC_{50} = 23$ nM).¹

References

1. Pullen, M.A., Laping, N., Edwards, R., *et al.* Determination of conformational changes in the progesterone receptor using ELISA-like assays. *Steroids* **71(9)**, 792-798 (2006).
2. Ishihara, M., Kirdani, Y., Osawa, Y., *et al.* The metabolic fate of medroxyprogesterone acetate in the baboon. *J. Steroid Biochem.* **7(1)**, 65-70 (1976).
3. Sturm, G., Häberlein, H., Bauer, T.L., *et al.* Mass spectrometric and high-performance liquid chromatographic studies of medroxyprogesterone acetate metabolites in human plasma. *J. Chromatogr.* **562(1-2)**, 351-362 (1991).

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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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