

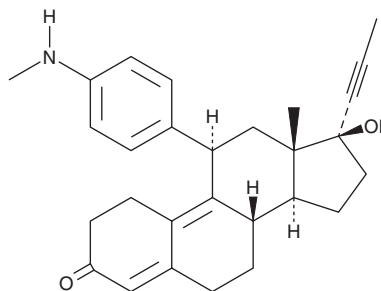
PRODUCT INFORMATION



Metapristone

Item No. 36380

CAS Registry No.: 104004-96-8
Formal Name: (11 β ,17 β)-17-hydroxy-11-[4-(methylamino)phenyl]-17-(1-propyn-1-yl)-estra-4,9-dien-3-one
Synonyms: N-desmethyl Mifepristone, RU-42633, N-desmethyl RU-486
MF: C₂₈H₃₃NO₂
FW: 415.6
Purity: \geq 98%
UV/Vis.: λ_{max} : 255, 303 nm
Supplied as: A 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

Metapristone is supplied as a solid. A stock solution may be made by dissolving the metapristone in the solvent of choice, which should be purged with an inert gas. Metapristone is slightly soluble in chloroform and methanol.

Description

Metapristone is an active metabolite of the glucocorticoid, progesterone, and androgen receptor antagonist mifepristone (Item No. 10006317).¹ It is formed from mifepristone by the cytochrome P450 (CYP) isoform CYP3A4. Metapristone is an antagonist of human glucocorticoid and progesterone receptors with relative affinities of 61 and 21%, respectively, compared to mifepristone.² It decreases the proliferation of A375 human and B16/F10 murine melanoma cells (IC₅₀s = 57.4 and 75.8 μ M, respectively).³ It induces cell cycle arrest at the G₁ phase in B16/F10 cells when used at a concentration of 80 μ M. Metapristone (2.5, 10, and 50 mg/kg per day) decreases the number of lung metastases in a B16/F10 murine model of lung metastasis.⁴

References

1. Khan, K.K., He, Y.Q., Correia, M.A., *et al.* Differential oxidation of mifepristone by cytochromes P450 3A4 and 3A5: Selective inactivation of P450 3A4. *Drug Metab. Dispos.* **30(9)**, 985-990 (2002).
2. Heikinheimo, O., Kontula, K., Croxatto, H., *et al.* Plasma concentrations and receptor binding of RU 486 and its metabolites in humans. *J. Steroid Biochem.* **26(2)**, 279-284 (1987).
3. Zheng, N., Chen, J., Liu, W., *et al.* Metapristone (RU486 derivative) inhibits cell proliferation and migration as melanoma metastatic chemopreventive agent. *Biomed. Pharmacother.* **90**, 339-349 (2017).
4. Wang, J., Chen, J., Zhu, Y., *et al.* In vitro and in vivo efficacy and safety evaluation of metapristone and mifepristone as cancer metastatic chemopreventive agents. *Biomed. Pharmacother.* **78**, 291-300 (2016).

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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