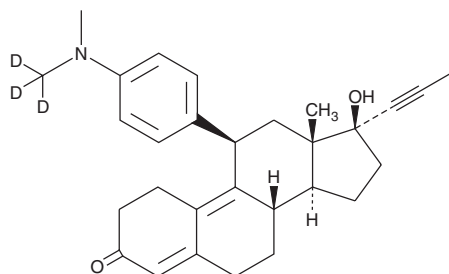


PRODUCT INFORMATION



Mifepristone-d₃ Item No. 10010660

Formal Name: 11β-[4-(dimethylamino-d₃)phenyl]-17β-hydroxy-17-(1-propynyl)-estra-4,9-dien-3-one
MF: C₂₉H₃₂D₃NO₂
FW: 432.6
Chemical Purity: ≥97% (Mifepristone)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀
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

Mifepristone-d₃ is intended for use as an internal standard for the quantification of mifepristone (Item No. 10006317) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Mifepristone-d₃ is supplied as a crystalline solid. A stock solution may be made by dissolving the mifepristone-d₃ in the solvent of choice. Mifepristone-d₃ is soluble in organic solvents such as chloroform and methanol, which should be purged with an inert gas.

Description

Mifepristone is an antagonist of glucocorticoid, progesterone, and androgen receptors (K_is = 0.1, 0.64, and 0.65 nM, respectively).¹⁻³ It is selective for these receptors over the mineralocorticoid receptor (MR), estrogen receptor α (ERα), and ERβ (K_is = 640, >200, and >750 nM, respectively).¹ In cell-based assays, mifepristone inhibits alkaline phosphatase activity stimulated by the progesterone receptor agonist R5020 as well as reporter transcription stimulated by either dexamethasone (Item No. 11015) or R5020 (IC₅₀s = 7, 5.9, and 1.3 nM, respectively).³ It also inhibits synthetic androgen R1881-stimulated reporter transcription in a concentration-dependent manner.² Mifepristone (10 μM) inhibits growth of 4-OHT-resistant MCF-7 breast cancer cells *in vitro*.⁴ It also inhibits tumor growth in an SKOV3 ovarian cancer nude mouse xenograft model when administered at doses of 0.5 or 1 mg per day.⁵ Formulations containing mifepristone have been used for the induction of medical abortions.

References

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3. Attardi, B.J., Burgenson, J., Hild, S.A., *et al.* *J. Steroid Biochem. Mol. Biol.* **88**(3), 277-288 (2004).
4. Gaddy, V.T., Barrett, J.T., Delk, J.N., *et al.* *Clin. Cancer Res.* **10**(15), 5215-5225 (2004).
5. Goyeneche, A.A., Carón, R.W., and Telleria, C.M. *Clin. Cancer Res.* **13**(11), 3370-3379 (2007).

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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