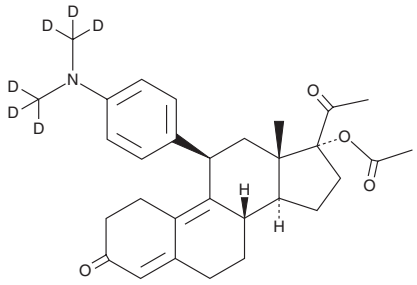
PRODUCT INFORMATION

Ulipristal Acetate-d_6

Item No. 26446

CAS Registry No.: 1621894-64-1
Formal Name: 17-(acetyloxy)-11β-[4-[di(methyl-d_3)amino]phenyl]-19-norpregna-4,9-diene-3,20-dione
MF: $C_{30}H_{31}D_6NO_4$
FW: 481.7
Chemical Purity: ≥98% (Ulipristal Acetate)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_6); ≤1% d_0
Supplied as: A 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

Ulipristal acetate-d_6 is intended for use as an internal standard for the quantification of ulipristal acetate (Item No. 23657) 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).

Ulipristal acetate-d_6 is supplied as a solid. A stock solution may be made by dissolving the ulipristal acetate-d_6 in the solvent of choice, which should be purged with an inert gas. Ulipristal acetate-d_6 is soluble in the organic solvent methanol, which should be purged with an inert gas.

Description

Ulipristal acetate is a selective progesterone receptor modulator (SPRM) that binds to the human progesterone receptors PR-A and PR-B (EC_{50}s = 8.5 and 7.7 nM, respectively), rabbit uterine PR (EC_{50} = 13.6 nM), and rabbit thymic glucocorticoid receptor (GR; EC_{50} = 15.4 nM).[1] It is selective for human progesterone receptors over the human estrogen receptor (ER; EC_{50} = >10,000 nM). It inhibits growth of IGROV-1 and SKOV3 human ovarian cancer cells (IC_{50}s = 15.5 and 31.5 µM, respectively) even after resistance to combined cisplatin (Item No. 13119) and paclitaxel (Item No. 10461) treatment has developed.[2] Ulipristal acetate reverses the proliferative effect of progesterone on patient-derived germline mutant *BRCA1* breast tissue xenografts in ovariectomized athymic mice.[3] Ulipristal acetate (40 mg/kg, i.p.) administered to female mice within 6 hours of human chorionic gonadotropin (hCG) treatment inhibits ovulation.[4] Formulations containing ulipristal acetate have been used as emergency contraceptives and to treat uterine fibroids.

References

1. Attardi, B.J., Burgenson, J., Hild, S.A., *et al. J. Steroid Biochem. Mol. Biol.* **88(3)**, 277-288 (2004).
2. Gamarra-Luques, C.D., Hapon, M.B., Goyeneche, A., *et al. J. Ovarian Res.* **7:45**, (2014).
3. Communcal, L., Vilasco, M., Hugon-Rodin, J., *et al. Oncotarget* **7(29)**, 45317-45330 (2016).
4. Nallasamy, S., Kim, J., Sitruk-Ware, R., *et al. Reprod. Sci.* **20(4)**, 371-381 (2013).

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