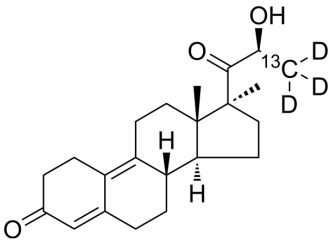
Trimegestone-$^{13}C,d_3$

Cat. No.:	HY-106827S1
Molecular Formula:	$C_{21}{}^{13}CH_{27}D_3O_3$
Molecular Weight:	346.48
Target:	Androgen Receptor; Phosphatase; Progesterone Receptor; Isotope-Labeled Compounds
Pathway:	Vitamin D Related/Nuclear Receptor; Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Trimegestone-$^{13}C,d_3$ is ^{13}C and deuterated labeled Trimegestone (HY-106827). Trimegestone (RU 27987) is an orally active 19-norpregnane progestin. Trimegestone binds to progesterone receptor (PR) with an IC_{50} value of 3.3 nM (rat PR). Trimegestone increases alkaline phosphatase activity (EC_{50}=0.1 nM) but not luciferase activity. Trimegestone also shows a weak antiandrogenic activity (weak androgen receptor affinity). Trimegestone can be used in studies of contraception or menopausal syndromes[1][2].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Wahab M, et al. Trimegestone: expanding therapeutic choices for the treatment of the menopause. Expert Opin Investig Drugs. 2001 Sep;10(9):1737-44.

[2]. Zhang Z, et al. In vitro characterization of trimegestone: a new potent and selective progestin. Steroids. 2000 Oct-Nov;65(10-11):637-43.

[3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA