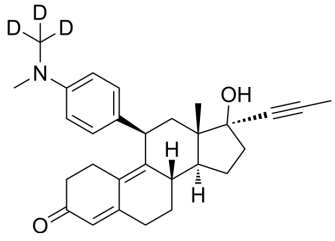
Mifepristone-d_3

Cat. No.:	HY-13683S		
Molecular Formula:	$C_{29}H_{32}D_3NO_2$		
Molecular Weight:	432.61		
Target:	Progesterone Receptor; Glucocorticoid Receptor; Autophagy; NO Synthase		
Pathway:	Vitamin D Related/Nuclear Receptor; Immunology/Inflammation; Autophagy		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Mifepristone-d_3 is the deuterium labeled Mifepristone. Mifepristone (RU486) is a progesterone receptor (PR) and glucocorticoid receptor (GR) antagonist with IC50s of 0.2 nM and 2.6 nM in in vitro assay[1].
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]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. Sharrett-Field L, et al. Mifepristone Pretreatment Reduces Ethanol Withdrawal Severity In Vivo. Alcohol Clin Exp Res. 2013 Aug;37(8):1417-23.

[3]. Yuehua You, et al. Progesterone Promotes Endothelial Nitric Oxide Synthase Expression Through Enhancing Nuclear Progesterone receptor-SP1 Formation. Am J Physiol Heart Circ Physiol. 2020 Jul 3.

[4]. Jiang W, et al. New progesterone receptor antagonists: phosphorus-containing 11beta-aryl-substituted steroids. Bioorg Med Chem. 2006 Oct 1;14(19):6726-32.

[5]. Jurado R, et al. NSC 119875 cytotoxicity is increased by mifepristone in cervical carcinoma: an in vitro and in vivo study. Oncol Rep. 2009 Nov;22(5):1237-45.

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