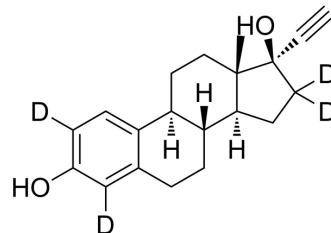


Ethynyl Estradiol-d₄

Cat. No.:	HY-B0216S		
CAS No.:	350820-06-3		
Molecular Formula:	C ₂₀ H ₂₀ D ₄ O ₂		
Molecular Weight:	300.43		
Target:	Estrogen Receptor/ERR; Endogenous Metabolite		
Pathway:	Vitamin D Related/Nuclear Receptor; Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (832.14 mM; Need ultrasonic)
 H₂O : 1 mg/mL (3.33 mM; ultrasonic and warming and heat to 80°C)

Preparing Stock Solutions	Solvent \ Mass	1 mg	5 mg	10 mg
	Concentration			
	1 mM	3.3286 mL	16.6428 mL	33.2856 mL
	5 mM	0.6657 mL	3.3286 mL	6.6571 mL
	10 mM	0.3329 mL	1.6643 mL	3.3286 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Ethynyl Estradiol-d₄ is the deuterium labeled Ethynyl Estradiol. Ethynyl Estradiol (17 α -Ethynylestradiol; Ethynylestradiol) is an orally bio-active estrogen used in almost all modern formulations of combined oral contraceptive pills. Ethynyl Estradiol-d₄ is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAC) with molecules containing Azide groups.

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.

Caution: Product has not been fully validated for medical applications. For research use only.

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