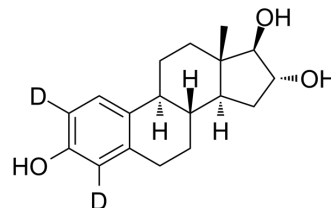


Estriol-d₂

Cat. No.:	HY-B0412S
CAS No.:	53866-32-3
Molecular Formula:	C ₁₈ H ₂₂ D ₂ O ₃
Molecular Weight:	290.39
Target:	Estrogen Receptor/ERR; Endogenous Metabolite
Pathway:	Vitamin D Related/Nuclear Receptor; Metabolic Enzyme/Protease
Storage:	4°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



BIOLOGICAL ACTIVITY

Description	Estriol-d ₂ is the deuterium labeled Estriol. Estriol is an antagonist of the G-protein coupled estrogen receptor in estrogen receptor-negative breast cancer cells.
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]. Morinaga, A., et al., Effects of sex hormones on Alzheimer's disease-associated beta-amyloid oligomer formation in vitro. *Exp Neurol*, 2011. 228(2): p. 298-302.
- [3]. Begum, M., et al., Neonatal estrogenic exposure suppresses PTEN-related endometrial carcinogenesis in recombinant mice. *Lab Invest*, 2006. 86(3): p. 286-96.
- [4]. Hewitt, S.C. and K.S. Korach, Estrogenic activity of bisphenol A and 2,2-bis(p-hydroxyphenyl)-1,1,1-trichloroethane (HPTE) demonstrated in mouse uterine gene profiles. *Environ Health Perspect*, 2011. 119(1): p. 63-70.

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