Inhibitors

## Estradiol benzoate-d<sub>3</sub>

Cat. No.: HY-B1192S CAS No.: 1192354-74-7 Molecular Formula:  $C_{25}H_{25}D_3O_3$ 

Molecular Weight: 379.51

Target: Estrogen Receptor/ERR

Pathway: Vitamin D Related/Nuclear Receptor

Storage: Powder -20°C 3 years

4°C 2 years In solvent -80°C 6 months

-20°C 1 month

## **BIOLOGICAL ACTIVITY**

Description	Estradiol benzoate-d <sub>3</sub> is the deuterium labeled Estradiol benzoate. Estradiol Benzoate (β-Estradiol 3-benzoate), a proagent of estradiol, acts as a steroid sex hormone. It exhibits mild anabolic and metabolic properties, and increases blood coagulability[1][2][3][4].
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 <sup>[1]</sup> .  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]. Estradiol benzoate
- [3]. García-Gómez E, et al. Role of sex steroid hormones in bacterial-host interactions. Biomed Res Int. 2013;2013:928290.
- [4]. Zovko M, et al. Macromolecular prodrugs XI. Synthesis and characterization of polymer-estradiol conjugate. Int J Pharm. 2004 Nov 5;285(1-2):35-41.

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