## **Product** Data Sheet

## Estradiol-d<sub>5</sub>

Cat. No.: HY-B0141S2 CAS No.: 221093-45-4 Molecular Formula:  $C_{18}H_{19}D_5O_2$ 

Molecular Weight: 277.41

Target: Estrogen Receptor/ERR; Endogenous Metabolite; 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

## **BIOLOGICAL ACTIVITY**

Description	Estradiol- $d_5$ is deuterium labeled Estradiol. Estradiol is a steroid sex hormone vital to the maintenance of fertility and secondary sexual characteristics in females. Estradiol upregulates IL-6 expression through the estrogen receptor $\beta$ (ER $\beta$ ) pathway[1][2][3].
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**

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 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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