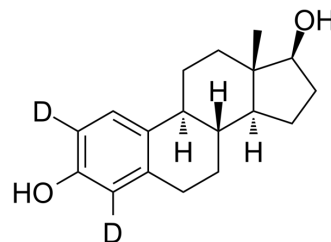


## Estradiol-d<sub>2</sub>

<b>Cat. No.:</b>	HY-B0141S3		
<b>CAS No.:</b>	53866-33-4		
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>22</sub> D <sub>2</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	274.39		
<b>Target:</b>	Estrogen Receptor/ERR; Endogenous Metabolite		
<b>Pathway:</b>	Vitamin D Related/Nuclear Receptor; Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

<b>Description</b>	Estradiol-d <sub>2</sub> is the 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 β (ERβ) pathway <sup>[1][2][3]</sup> .
<b>In Vitro</b>	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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- [4]. Quanfu Huang, et al. 17β-estradiol Upregulates IL6 Expression Through the ERβ Pathway to Promote Lung Adenocarcinoma Progression. *J Exp Clin Cancer Res.* 2018 Jul 3;37(1):133.
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- [7]. Harburger LL, et al. Dose-dependent effects of post-training estradiol plus progesterone treatment on object memory consolidation and hippocampal extracellular signal-regulated kinase activation in young ovariectomized mice. *Neuroscience.* 2009;160(1):6-12

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

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