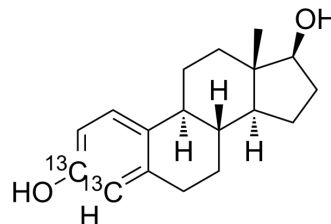


Estradiol-¹³C₂

Cat. No.:	HY-B0141S5
CAS No.:	82938-05-4
Molecular Formula:	C ₁₆ ¹³ C ₂ H ₂₄ O ₂
Molecular Weight:	274.37
Target:	Estrogen Receptor/ERR; Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Vitamin D Related/Nuclear Receptor; Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Estradiol- ¹³ C ₂ is the ¹³ C-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[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 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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- [3]. Woolley CS, et al. Estradiol mediates fluctuation in hippocampal synapse density during the estrous cycle in the adult rat. *J Neurosci.* 1992 Jul;12(7):2549-54.
- [4]. Woolley CS, et al. Roles of estradiol and progesterone in regulation of hippocampal dendritic spine density during the estrous cycle in the rat. *J Comp Neurol.* 1993 Oct 8;336(2):293-306.
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Caution: Product has not been fully validated for medical applications. For research use only.

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