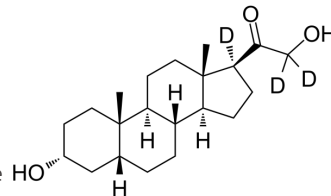


## Tetrahydrodeoxycorticosterone-d<sub>3</sub>

<b>Cat. No.:</b>	HY-113346S		
<b>CAS No.:</b>	72205-58-4		
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>31</sub> D <sub>3</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	337.51		
<b>Target:</b>	GABA Receptor; Endogenous Metabolite		
<b>Pathway:</b>	Membrane Transporter/Ion Channel; Neuronal Signaling; 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

#### Description

Tetrahydrodeoxycorticosterone-d<sub>3</sub> is the deuterium labeled Tetrahydrodeoxycorticosterone. Tetrahydrodeoxycorticosterone, an neurosteroid, is a potent positive allosteric modulator (PAM) of GABA<sub>A</sub> receptor. Tetrahydrodeoxycorticosterone has potent neuroinhibitory properties<sup>[1][2][3]</sup>.

#### 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.

### CUSTOMER VALIDATION

- Cell Rep Med. 2023 May 24;101061.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Hua-Jun Feng, et al. Comparison of αβδ and αβγ GABA<sub>A</sub> receptors: Allosteric modulation and identification of subunit arrangement by site-selective general anesthetics. *Pharmacol Res.* 2018 Jul;133:289-300.
- [3]. Roger F Butterworth. Neurosteroids in hepatic encephalopathy: Novel insights and new therapeutic opportunities. *J Steroid Biochem Mol Biol.* 2016 Jun;160:94-7.

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

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