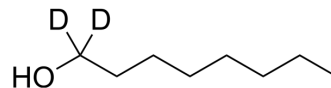


1-Octanol-d₂

Cat. No.:	HY-W032013S1
CAS No.:	78510-02-8
Molecular Formula:	C ₈ H ₁₆ D ₂ O
Molecular Weight:	132.24
Target:	Calcium Channel; Endogenous Metabolite
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	1-Octanol-d ₂ is the deuterium labeled 1-Octanol[1]. 1-Octanol (Octanol), a saturated fatty alcohol, is a T-type calcium channels (T-channels) inhibitor with an IC ₅₀ of 4 μM for native T-currents[2]. 1-Octanol is a highly attractive biofuel with diesel-like properties[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

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211-216.
- [2]. Joksovic PM, et al. Mechanisms of inhibition of T-type calcium current in the reticular thalamic neurons by 1-octanol: implication of the protein kinase C pathway. *Mol Pharmacol*. 2010 Jan;77(1):87-94.
- [3]. Akhtar MK, et al. Microbial production of 1-octanol: A naturally excreted biofuel with diesel-like properties. *Metab Eng Commun*. 2014 Nov 132:1-5.

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