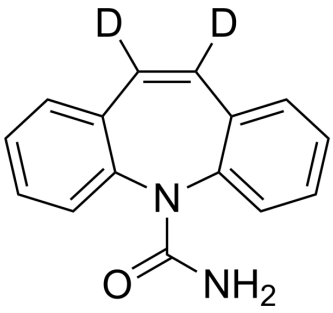
Carbamazepine-d2

Cat. No.:	HY-B0246S1
CAS No.:	1189902-21-3
Molecular Formula:	$C_{15}H_{10}D_2N_2O$
Molecular Weight:	238.28
Target:	Autophagy; Sodium Channel; Mitophagy; Isotope-Labeled Compounds
Pathway:	Autophagy; Membrane Transporter/Ion Channel; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Carbamazepine-d_2 is the deuterium labeled Carbamazepine. Carbamazepine, a sodium channel blocker, is an anticonvulsant agent.
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;53(2):211-216.

[2]. Willow, M. and W.A. Catterall, Inhibition of binding of [3H]batrachotoxinin A 20-alpha-benzoate to sodium channels by the anticonvulsant drugs diphenylhydantoin and carbamazepine. Mol Pharmacol, 1982. 22(3): p. 627-35.

[3]. Okada, M., et al., Biphasic effects of carbamazepine on the dopaminergic system in rat striatum and hippocampus. Epilepsy Res, 1997. 28(2): p. 143-53.

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