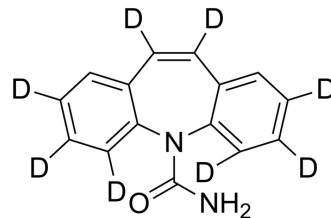


## Carbamazepine-d<sub>8</sub>

Cat. No.:	HY-B0246S2
CAS No.:	1538624-35-9
Molecular Formula:	C <sub>15</sub> H <sub>4</sub> D <sub>8</sub> N <sub>2</sub> O
Molecular Weight:	244.32
Target:	Sodium Channel; Autophagy; Mitophagy
Pathway:	Membrane Transporter/Ion Channel; Autophagy
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

#### Description

Carbamazepine-d<sub>8</sub> is the deuterium labeled Carbamazepine. Carbamazepine, a sodium channel blocker, is an anticonvulsant agent, with an IC<sub>50</sub> of 131 μM[1][2].

### REFERENCES

- [1]. 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.
- [2]. 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.
- [3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019;53(2):211-216.

**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](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA