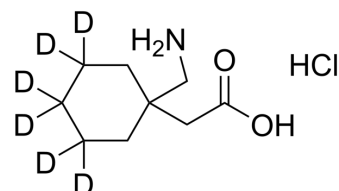


## Gabapentin-d<sub>6</sub> hydrochloride

<b>Cat. No.:</b>	HY-A0057AS
<b>CAS No.:</b>	1432061-73-8
<b>Molecular Formula:</b>	C <sub>9</sub> H <sub>12</sub> D <sub>6</sub> ClNO <sub>2</sub>
<b>Molecular Weight:</b>	213.73
<b>Target:</b>	Calcium Channel; Isotope-Labeled Compounds
<b>Pathway:</b>	Membrane Transporter/Ion Channel; Neuronal Signaling; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Gabapentin-d <sub>6</sub> (hydrochloride) is deuterium labeled Gabapentin (hydrochloride).
<b>In Vitro</b>	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.

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Harden RN, et al. A Phase 2a, Randomized, Crossover Trial of Gabapentin Enacarbil for the Treatment of Postherpetic Neuralgia in Gabapentin Inadequate Responders. *Pain Med.* 2013 Sep 18.
- [3]. Lee BS, et al. Intrathecal gabapentin increases interleukin-10 expression and inhibits pro-inflammatory cytokine in a rat model of neuropathic pain. *J Korean Med Sci.* 2013 Feb;28(2):308-14.
- [4]. Parker DA, et al. Gabapentin activates presynaptic GABAB heteroreceptors in rat cortical slices. *Eur J Pharmacol.* 2004 Jul 14;495(2-3):137-43.
- [5]. Receveur JM, et al. Synthesis and biological evaluation of conformationally restricted Gabapentin analogues. *Bioorg Med Chem Lett.* 1999 Aug 16;9(16):2329-34.
- [6]. Stefani A, et al. Gabapentin inhibits calcium currents in isolated rat brain neurons. *Neuropharmacology.* 1998;37(1):83-91.

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

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