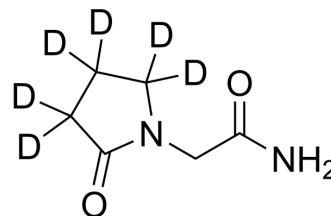


## Piracetam-d<sub>6</sub>

Cat. No.:	HY-B0585S1
Molecular Formula:	C <sub>6</sub> H <sub>4</sub> D <sub>6</sub> N <sub>2</sub> O <sub>2</sub>
Molecular Weight:	148.19
Target:	iGluR; Isotope-Labeled Compounds
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Piracetam-d <sub>6</sub> is deuterium labeled Piracetam. Piracetam (UCB-6215) is a cyclic derivative of the neurotransmitter gamma-aminobutyric acid (GABA), used in treatment of a wide range of cognitive disorders.
<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]. Mingeot-Leclercq, M.P., et al., Piracetam inhibits the lipid-destabilising effect of the amyloid peptide Abeta C-terminal fragment. *Biochim Biophys Acta*, 2003. 1609(1): p. 28-38.
- [3]. Muller, W.E., et al., Effects of piracetam on membrane fluidity in the aged mouse, rat, and human brain. *Biochem Pharmacol*, 1997. 53(2): p. 135-40.
- [4]. Scheuer, K., et al., Piracetam improves cognitive performance by restoring neurochemical deficits of the aged rat brain. *Pharmacopsychiatry*, 1999. 32 Suppl 1: p. 10-6.

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

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