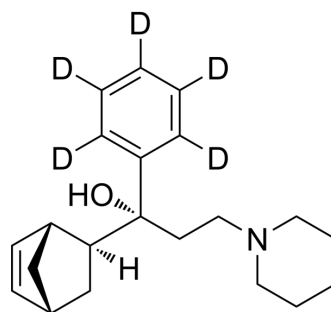


## rel-Biperiden-d<sub>5</sub>

<b>Cat. No.:</b>	HY-13204S1
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>24</sub> D <sub>5</sub> NO
<b>Molecular Weight:</b>	316.49
<b>Target:</b>	mAChR; Isotope-Labeled Compounds
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	rel-Biperiden-d <sub>5</sub> is deuterium labeled Biperiden (hydrochloride).
<b>IC<sub>50</sub> &amp; Target</b>	mAChR1
<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]. Kornhuber J, et al. Identification of novel functional inhibitors of acid sphingomyelinase. PLoS One. 2011;6(8)
- [2]. Myhrer T, et al. Antiparkinson drugs used as prophylactics for nerve agents: studies of cognitive side effects in rats. Pharmacol Biochem Behav. 2008 Jun;89(4):633-8.
- [3]. Pehl C, et al. Effects of two anticholinergic drugs, trospium chloride and biperiden, on motility and evoked potentials of the oesophagus. Aliment Pharmacol Ther. 1998 Oct;12(10)
- [4]. 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.**

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