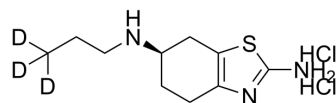


## Dexpramipexole-d<sub>3</sub> dihydrochloride

<b>Cat. No.:</b>	HY-17355BS
<b>CAS No.:</b>	1432230-09-5
<b>Molecular Formula:</b>	C <sub>10</sub> H <sub>16</sub> D <sub>3</sub> Cl <sub>2</sub> N <sub>3</sub> S
<b>Molecular Weight:</b>	287.27
<b>Target:</b>	Dopamine Receptor; 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>	Dexpramipexole-d <sub>3</sub> (dihydrochloride) is the deuterium labeled Dexpramipexole. Dexpramipexole((R)-Pramipexole), also known as R-(+)-Pramipexole, is a neuroprotective agent and weak non-ergoline dopamine agonist[1][2].
<b>IC<sub>50</sub> &amp; Target</b>	D <sub>3</sub> Receptor
<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]. Rudnicki SA, Berry JD, Ingersoll E, et al. Dexpramipexole effects on functional decline and survival in subjects with amyotrophic lateral sclerosis in a Phase II study: subgroup analysis of demographic and clinical characteristics. *Amyotroph Lateral Scler*
- [3]. Alavian KN, Dworetzky SI, Bonanni L, et al. Effects of dexpramipexole on brain mitochondrial conductances and cellular bioenergetic efficiency. *Brain Res.* 2012 Mar 29;1446:1-11.
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- [6]. Cheah BC, Kiernan MC. Dexpramipexole, the R(+) enantiomer of pramipexole, for the potential treatment of amyotrophic lateral sclerosis. *IDrugs.* 2010 Dec;13(12):911-20.

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

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