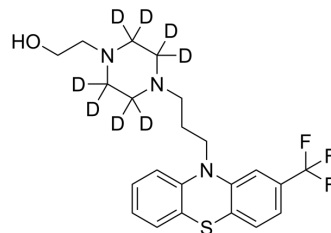


## Fluphenazine-d<sub>8</sub>

<b>Cat. No.:</b>	HY-119980S
<b>CAS No.:</b>	1323633-98-2
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>18</sub> D <sub>8</sub> F <sub>3</sub> N <sub>3</sub> OS
<b>Molecular Weight:</b>	445.57
<b>Target:</b>	Sodium Channel; Dopamine Receptor; SARS-CoV; Isotope-Labeled Compounds
<b>Pathway:</b>	Membrane Transporter/Ion Channel; GPCR/G Protein; Neuronal Signaling; Anti-infection; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Fluphenazine-d <sub>8</sub> is the deuterium labeled Fluphenazine. Fluphenazine is a potent, orally active phenothiazine-based dopamine receptor antagonist. Fluphenazine blocks neuronal voltage-gated sodium channels. Fluphenazine acts primarily through antagonism of postsynaptic dopamine-2 receptors in mesolimbic, nigrostriatal, and tuberoinfundibular neural pathways. Fluphenazine can antagonize Methylphenidate-induced stereotyped gnawing and inhibit climbing behaviour in mice. Fluphenazine can be used for researching psychosis and painful peripheral neuropathy associated with diabetes and has potential to inhibit SARS-CoV-2 <sup>[1][2][3][4][5][6]</sup> .
<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

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

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

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