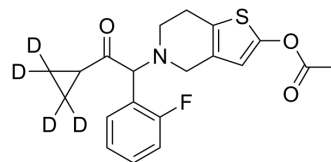


## Prasugrel-d<sub>4</sub>

<b>Cat. No.:</b>	HY-15284S2
<b>CAS No.:</b>	1189919-49-0
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>16</sub> D <sub>4</sub> FNO <sub>3</sub> S
<b>Molecular Weight:</b>	377.47
<b>Target:</b>	P2Y Receptor
<b>Pathway:</b>	GPCR/G Protein
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Prasugrel-d <sub>4</sub> is the deuterium labeled Prasugrel[1]. Prasugrel (PCR 4099), a thienopyridine and proagent, inhibits platelet function. Prasugrel is an orally active and potent P2Y <sub>12</sub> receptor antagonist, and inhibits ADP-induced platelet aggregation[2].
<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 Feb;53(2):211-216.
- [2]. Wijeyeratne YD, et al. Anti-platelet therapy: ADP receptor antagonists. *Br J Clin Pharmacol*. 2011 Oct;72(4):647-57.
- [3]. Sugidachi A, et al. The greater in vivo antiplatelet effects of prasugrel as compared to clopidogrel reflect more efficient generation of its active metabolite with similar antiplatelet activity to that of clopidogrel's active metabolite. *J Thromb Haemost*. 2007 Jul;5(7):1545-51.

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

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