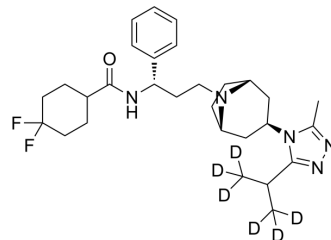


## Maraviroc-d<sub>6</sub>

<b>Cat. No.:</b>	HY-13004S
<b>CAS No.:</b>	1033699-22-7
<b>Molecular Formula:</b>	C <sub>29</sub> H <sub>35</sub> D <sub>6</sub> F <sub>2</sub> N <sub>5</sub> O
<b>Molecular Weight:</b>	519.7
<b>Target:</b>	CCR; HIV; Isotope-Labeled Compounds
<b>Pathway:</b>	GPCR/G Protein; Immunology/Inflammation; Anti-infection; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Maraviroc-d <sub>6</sub> (UK-427857-d6) is the deuterium labeled Maraviroc. Maraviroc (UK-427857) is a selective CCR5 antagonist with activity against human HIV[1][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;53(2):211-216.
- [2]. Dorr P, et al. Maraviroc (UK-427,857), a potent, orally bioavailable, and selective small-molecule inhibitor of chemokine receptor CCR5 with broad-spectrum anti-human immunodeficiency virus type 1 activity. *Antimicrob Agents Chemother.* 2005 Nov;49(11):472
- [3]. Mencarelli A, et al. Highly specific blockade of CCR5 inhibits leukocyte trafficking and reduces mucosal inflammation in murine colitis. *Sci Rep.* 2016 Aug 5;6:30802.
- [4]. Romero-Sánchez MC, et al. Effect of maraviroc on HIV-disease progression-related biomarkers. *Antimicrob Agents Chemother.* 2012 Nov;56(11):5858-64.
- [5]. Huilin Mou, et al. NRSF and CCR5 Established Neuron-glia Communication during Acute and Chronic Stresses. *Journal of Drug Metabolism & Toxicology.* January 10, 2016.

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

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