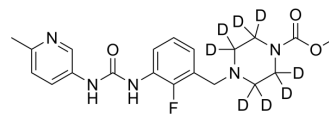


## Omecamtiv mecarbil-d<sub>8</sub>

<b>Cat. No.:</b>	HY-14233S
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>16</sub> D <sub>8</sub> FN <sub>5</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	409.48
<b>Target:</b>	Myosin; Isotope-Labeled Compounds
<b>Pathway:</b>	Cytoskeleton; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Omecamtiv mecarbil-d <sub>8</sub> is the deuterium labeled Omecamtiv mecarbil. Omecamtiv mecarbil (CK-1827452) is a selective cardiac myosin activator.
<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]. Morgan BP, et al. Discovery of omecamtiv mecarbil the first, selective, small molecule activator of cardiac Myosin. *ACS Med Chem Lett.* 2010 Aug 20;1(9):472-7.
- [3]. Mamidi R, et al. Molecular effects of the myosin activator omecamtiv mecarbil on contractile properties of skinned myocardium lacking cardiac myosin binding protein-C. *J Mol Cell Cardiol.* 2015 Aug;85:262-72.
- [4]. Swenson AM, et al. Omecamtiv Mecarbil Enhances the Duty Ratio of Human β-Cardiac Myosin Resulting in Increased Calcium Sensitivity and Slowed Force Development in Cardiac Muscle. *J Biol Chem.* 2017 Mar 3;292(9):3768-3778.

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

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