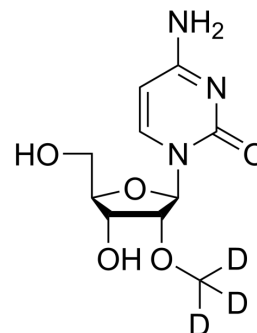


## 2'-O-Methylcytidine-d<sub>3</sub>

<b>Cat. No.:</b>	HY-W011834S
<b>CAS No.:</b>	2653209-08-4
<b>Molecular Formula:</b>	C <sub>10</sub> H <sub>12</sub> D <sub>3</sub> N <sub>3</sub> O <sub>5</sub>
<b>Molecular Weight:</b>	260.26
<b>Target:</b>	Isotope-Labeled Compounds; HCV
<b>Pathway:</b>	Others; Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	2'-O-Methylcytidine-d <sub>3</sub> is deuterium labeled 2'-O-Methylcytidine (HY-W011834). 2'-O-Methylcytidine is a 2'-substituted nucleoside as a inhibitor of HCV replication. 2'-O-Methylcytidine inhibits RNA-dependent RNA polymerase (NS5B)-catalyzed RNA synthesis in vitro, in a manner that is competitive with substrate nucleoside triphosphate.
<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]. Steven S Carroll, et al. Inhibition of hepatitis C virus RNA replication by 2'-modified nucleoside analogs. *J Biol Chem*. 2003 Apr 4;278(14):11979-84

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

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