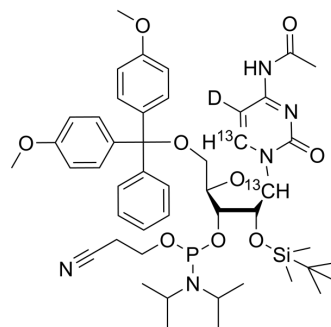


## Ac-rC Phosphoramidite-<sup>13</sup>C<sub>2</sub>,d<sub>1</sub>

<b>Cat. No.:</b>	HY-W042357S3
<b>Molecular Formula:</b>	C <sub>45</sub> <sup>13</sup> C <sub>2</sub> H <sub>63</sub> DN <sub>5</sub> O <sub>9</sub> PSi
<b>Molecular Weight:</b>	905.09
<b>Target:</b>	Isotope-Labeled Compounds; DNA/RNA Synthesis
<b>Pathway:</b>	Others; Cell Cycle/DNA Damage
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Ac-rC Phosphoramidite- <sup>13</sup> C <sub>2</sub> ,d <sub>1</sub> is deuterium and <sup>13</sup> C-labeled Ac-rC Phosphoramidite (HY-W042357). Ac-rC Phosphoramidite is used for the oligoribonucleotide phosphorodithioate modification (PS2-RNA).
<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]. Wipapat Kladwang, et al. Anomalous Reverse Transcription through Chemical Modifications in Polyadenosine Stretches. *Biochemistry*. 2020 Jun 16;59(23):2154-2170.

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

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