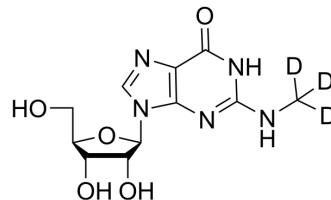


## N2-Methylguanosine-d<sub>3</sub>

|                    |   |
|--------------------|---|
| Cat. No.:          | HY-111647S1   |
| Molecular Formula: | C <sub>11</sub> H <sub>12</sub> D <sub>3</sub> N <sub>5</sub> O <sub>5</sub>              |
| Molecular Weight:  | 300.29  |
| Target:            | Isotope-Labeled Compounds; Nucleoside Antimetabolite/Analog; Endogenous Metabolite        |
| Pathway:           | Others; Cell Cycle/DNA Damage; Metabolic Enzyme/Protease                                  |
| Storage:           | Please store the product under the recommended conditions in the Certificate of Analysis. |



### BIOLOGICAL ACTIVITY

|                    |  |
|--------------------|--|
| <b>Description</b> | N2-Methylguanosine-d <sub>3</sub> is deuterium labeled N2-Methylguanosine (HY-111647). N2-methylguanosine is a modified nucleoside that occurs at several specific locations in many tRNA's.   |
| <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> .<br>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]. Ginell SL, et al. Conformation of N2-methylguanosine, a modified nucleoside of tRNA. *Biochem Biophys Res Commun*. 1978 Oct 30;84(4):886-94.

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

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