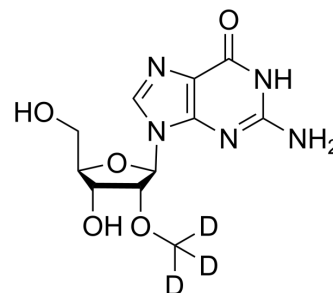


## 2'-O-Methylguanosine-d<sub>3</sub>

<b>Cat. No.:</b>	HY-W013260S1
<b>Molecular Formula:</b>	C <sub>11</sub> H <sub>12</sub> D <sub>3</sub> N <sub>5</sub> O <sub>5</sub>
<b>Molecular Weight:</b>	300.29
<b>Target:</b>	Isotope-Labeled Compounds; Apoptosis; Nucleoside Antimetabolite/Analog
<b>Pathway:</b>	Others; Apoptosis; 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>	2'-O-Methylguanosine-d <sub>3</sub> is deuterium labeled 2'-O-Methylguanosine (HY-W013260). 2'-O-Methylguanosine is a modified nucleoside produced in tRNAs by the action of tRNA guanosine-2'-O-methyltransferase. 2'-O-Methylguanosine results in apoptotic changes of cells.
<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]. B C Persson, et al. The spoU gene of Escherichia coli, the fourth gene of the spoT operon, is essential for tRNA (Gm18) 2'-O-methyltransferase activity. *Nucleic Acids Res.* 1997 Oct 15;25(20):4093-7.
- [3]. T Mori, et al. Isolation and identification of apoptosis inducing nucleosides from CD57(+)HLA-DRbright natural suppressor cell line. *Biochem Biophys Res Commun.* 1998 Oct 20;251(2):416-22.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA