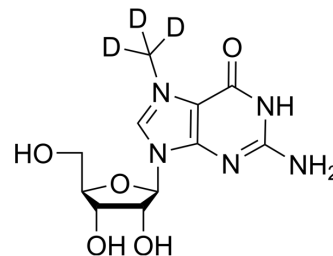


7-Methylguanosine-d3

Cat. No.:	HY-122524S		
Molecular Formula:	C ₁₁ H ₁₃ D ₃ N ₅ O ₅		
Molecular Weight:	301.29		
Target:	Nucleoside Antimetabolite/Analog; Endogenous Metabolite		
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	7-Methylguanosine-d3 is the deuterium labeled 7-Methylguanosine[1]. 7-Methylguanosine is a novel cNIIIB nucleotidase inhibitor with IC50 value of 87.8 ± 7.5 μM[2].
In Vitro	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 ^[1] . 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]. Kozarski M, et al. 7-Methylguanosine monophosphate analogues with 5'-(1,2,3-triazoyl) moiety: Synthesis and evaluation as the inhibitors of cNIIIB nucleotidase. *Bioorg Med Chem*. 2018 Jan 1;26(1):191-199.

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

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