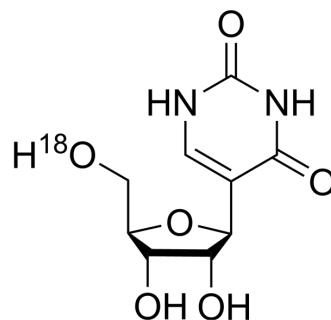


Pseudouridine-O¹⁸

Cat. No.:	HY-113061S
Molecular Formula:	C ₉ H ₁₂ N ₂ O ₅ ¹⁸ O
Molecular Weight:	246.2
Target:	Isotope-Labeled Compounds; Endogenous Metabolite; Nucleoside Antimetabolite/Analog; DNA/RNA Synthesis
Pathway:	Others; Metabolic Enzyme/Protease; Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Pseudouridine- ¹⁸ O is the ¹⁸ O labeled Pseudouridine (HY-113061). Pseudouridine is an isomer of the nucleoside uridine, and the most abundant modified nucleoside in non-coding RNAs. Pseudouridine in rRNA and tRNA can fine-tune and stabilize the regional structure and help maintain their functions in mRNA decoding, ribosome assembly, processing and translation.
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

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- [2]. Carlile TM, et al. Pseudouridine profiling reveals regulated mRNA pseudouridylation in yeast and human cells. *Nature*. 2014 Nov 6;515(7525):143-6.
- [3]. M Charette, et al. Pseudouridine in RNA: what, where, how, and why. *IUBMB Life*. 2000 May;49(5):341-51.
- [4]. Junhui Ge, et al. RNA pseudouridylation: new insights into an old modification. *Trends Biochem Sci*. 2013 Apr;38(4):210-8.
- [5]. Anne C Rintala-Dempsey, et al. Eukaryotic stand-alone pseudouridine synthases - RNA modifying enzymes and emerging regulators of gene expression? *RNA Biol*. 2017 Sep 2;14(9):1185-1196.

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

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