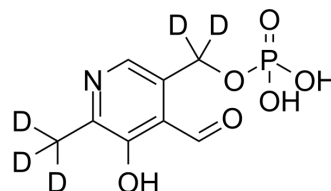


Pyridoxal phosphate-d5

Cat. No.:	HY-B1744S
CAS No.:	1246818-16-5
Molecular Formula:	C ₈ H ₅ D ₅ NO ₆ P
Molecular Weight:	252.17
Target:	Reverse Transcriptase; Endogenous Metabolite
Pathway:	Anti-infection; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Pyridoxal phosphate-d5 (Pyridoxal 5'-phosphate-d5) is the deuterium labeled Pyridoxal phosphate. Pyridoxal phosphate is the active form of vitamin B6, acts as an inhibitor of reverse transcriptases, and is used for the treatment of tardive dyskinesia ^{[1][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;53(2):211-216.
- [2]. Modak MJ. Pyridoxal 5' phosphate: a selective inhibitor of oncornaviral DNA polymerases. *Biochem Biophys Res Commun.* 1976 Jul 12;71(1):180-7.
- [3]. Grin IR, et al. Inactivation of NEIL2 DNA glycosylase by pyridoxal phosphate reveals a loop important for substrate binding. *Biochem Biophys Res Commun.* 2010 Mar 26;394(1):100-5.

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

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