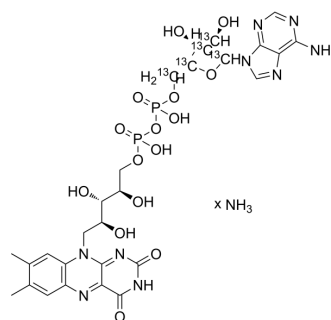


Flavin adenine dinucleotide-¹³C₅ ammonium

Cat. No.:	HY-B1654S
Molecular Formula:	C ₂₂ ¹³ C ₅ H ₃₃ N ₉ O ₁₅ P ₂ ·xNH ₃
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Flavin adenine dinucleotide- ¹³ C ₅ (FAD- ¹³ C ₅) ammonium is ¹³ C labeled Flavin adenine dinucleotide (HY-B1654). Flavin adenine dinucleotide (FAD) is a redox cofactor, more specifically a prosthetic group of a protein, involved in several important enzymatic reactions in metabolism.
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]. Sugiyama S, et al. Protection of chlorpromazine-induced arrhythmia by flavin-adenine-dinucleotide in canine heart. *Jpn Heart J.* 1979 Sep;20(5):657-65.
- [2]. Karyakin AA, et al. Electropolymerized flavin adenine dinucleotide as an advanced NADH transducer. *Anal Chem.* 2004 Apr 1;76(7):2004-9.
- [3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019 Feb;53(2):211-216.

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

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