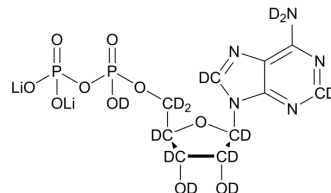


Adenosine 5'-diphosphate-d¹³ dilithium

Cat. No.:	HY-W010918S
Molecular Formula:	C ₁₀ D ₁₃ Li ₂ N ₅ O ₁₀ P ₂
Molecular Weight:	452.15
Target:	Isotope-Labeled Compounds; Endogenous Metabolite
Pathway:	Others; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Adenosine 5'-diphosphate-d ₁₃ (Adenosine diphosphate-d ₁₃ dilithium; ADP-d ₁₃) dilithium is deuterium labeled Adenosine 5'-diphosphate (HY-W010918). Adenosine 5'-diphosphate (Adenosine diphosphate) is a nucleoside diphosphate. Adenosine 5'-diphosphate is the product of ATP dephosphorylation by ATPases. Adenosine 5'-diphosphate induces human platelet aggregation and inhibits stimulated adenylate cyclase by an action at P _{2T} -purinoceptors.
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]. Arts IC, et al. Adenosine 5'-triphosphate (ATP) supplements are not orally bioavailable: a randomized, placebo-controlled cross-over trial in healthy humans. *J Int Soc Sports Nutr.* 2012 Apr 17;9(1):16.
- [3]. Noel J. Cusack, et al. Effects of phosphate-modified analogs of adenosine 5'-diphosphate and adenosine 5'-triphosphate at P_{2T}-purinoceptors mediating human platelet activation by ADP. April 1996.
- [4]. Adenosine-5'-diphosphate

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

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