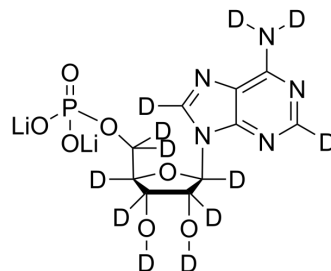


## Adenosine monophosphate-d<sub>12</sub> dilithium

Cat. No.:	HY-A0181S2
Molecular Formula:	C <sub>10</sub> D <sub>12</sub> Li <sub>2</sub> N <sub>5</sub> O <sub>7</sub> P
Molecular Weight:	371.16
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

<b>Description</b>	Adenosine monophosphate-d <sub>12</sub> (AMP-d <sub>12</sub> ) dilithium is deuterium labeled Adenosine monophosphate (HY-A0181). Adenosine monophosphate is a key cellular metabolite regulating energy homeostasis and signal transduction.
<b>In Vitro</b>	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 <sup>[1]</sup> . 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]. Mondal S, et al. Utility of Adenosine Monophosphate Detection System for Monitoring the Activities of Diverse Enzyme Reactions. *Assay Drug Dev Technol*. 2017 Oct/Nov;15(7):330-341.

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

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