## **Product** Data Sheet

## Adenosine-d1-1

**Cat. No.:** HY-B0228S7 **CAS No.:** 119540-53-3

Molecular Formula:  $C_{10}H_{12}DN_5O_4$ Molecular Weight: 268.25

Target: Apoptosis; Autophagy; Endogenous Metabolite; Nucleoside Antimetabolite/Analog

Pathway: Apoptosis; Autophagy; Metabolic Enzyme/Protease; Cell Cycle/DNA Damage

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	Adenosine-d1-1 is the deuterium labeled Adenosine. Adenosine (Adenine riboside), a ubiquitous endogenous autacoid, acts through the enrollment of four G protein-coupled receptors: A1, A2A, A2B, and A3. Adenosine affects almost all aspects of cellular phys
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 <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]. Borea PA, Gessi S, Merighi S, Vincenzi F, Varani K. Pharmacology of Adenosine Receptors: The State of the Art. Physiol Rev. 2018;98(3):1591-1625.;Fredholm BB. Adenosine, an endogenous distress signal, modulates tissue damage and repair. Cell Death Differ.

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

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