## **Product** Data Sheet

## 5'-Guanylic acid-<sup>13</sup>C<sub>10</sub> dilithium

Cat. No.: HY-N5134S1 Molecular Formula:  ${}^{13}C_{10}H_{12}Li_2N_5O_8P$ 

Molecular Weight: 385.01

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	5'-Guanylic acid- $^{13}$ C $_{10}$ (5'-GMP- $^{13}$ C $_{10}$ dilithium; 5'-guanosine monophosphate- $^{13}$ C $_{10}$ ) dilithium is $^{13}$ C-labeled 5'-Guanylic acid (HY-N5134). 5'-Guanylic acid (5'-GMP) is involved in several metabolic disorders, including the AICA-ribosiduria pathway, adenosine deaminase deficiency, adenine phosphoribosyltransferase deficiency (aprt), and the 2-hydroxyglutric aciduria pathway.
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.

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

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