## **Product** Data Sheet

## Deoxythymidine-5'-triphosphate-13C<sub>10</sub>,15N<sub>2</sub> dilithium

**Cat. No.:** HY-138615S4 **CAS No.:** 2483830-18-6

Molecular Formula:  ${}^{13}C_{10}H_{15}Li_2^{15}N_2O_{14}P_3$ 

Molecular Weight: 505.95

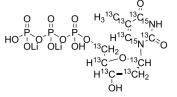
Target: Isotope-Labeled Compounds; DNA/RNA Synthesis; Nucleoside

Antimetabolite/Analog; Endogenous Metabolite

Pathway: Others; Cell Cycle/DNA Damage; Metabolic Enzyme/Protease

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

Analysis.



## **BIOLOGICAL ACTIVITY**

 $\begin{array}{ll} \textbf{Description} & \textbf{Deoxythymidine-5'-triphosphate-$^{13}$C$}_{10}, ^{15}$N$_2$ (dTTP-$^{13}$C$_{10}, ^{15}$N$_2$) dilithium is $^{13}$C$ and $^{15}$N-labeled Deoxythymidine-5'-triphosphate (HY-138615). Deoxythymidine-5'-triphosphate (dTTP) is one of the four nucleoside triphosphates. \\ \textbf{Deoxythymidine-5'-triphosphate}$ (dTTP)$ is used in the synthesis of DNA. \\ \end{array}$ 

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]. Tattersall MH, et al. Deoxyribonucleoside triphosphates in human cells: changes in disease and following exposure to drugs. Eur J Clin Invest. 1975;5(2):191-202.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA