

Product Data Sheet

Product Name: Deoxythymidine-5'-triphosphate-13C10 dilithium

Cat. No.: GC73068

Chemical Properties

Cas. No. 365-08-2

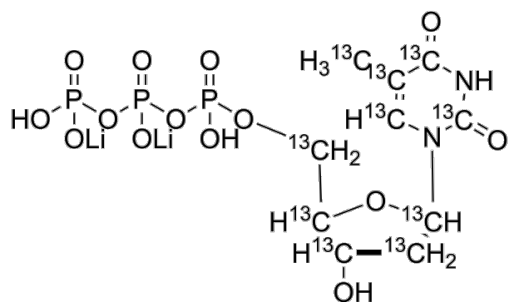
Formula $^{13}\text{C}_{10}\text{H}_{15}\text{Li}_2\text{N}_2\text{O}_{14}\text{P}_3$ M.Wt 503.96

Solubility Storage Solution, -20°C, 2 years

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Deoxythymidine-5'-triphosphate-13C10 (dTTP-13C10) dilithium is 13C-labeled Deoxythymidine-5'-triphosphate. Deoxythymidine-5'-triphosphate (dTTP) is one of the four nucleoside triphosphates. Deoxythymidine-5'-triphosphate (dTTP) is used in the synthesis of DNA.

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].

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

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: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA