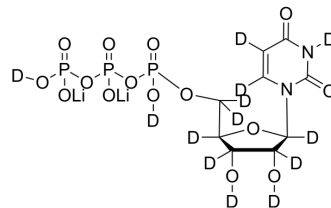


## Uridine triphosphate-d<sub>13</sub> dilithium

<b>Cat. No.:</b>	HY-107372S3
<b>Molecular Formula:</b>	C <sub>9</sub> D <sub>13</sub> Li <sub>2</sub> N <sub>2</sub> O <sub>15</sub> P <sub>3</sub>
<b>Molecular Weight:</b>	509.09
<b>Target:</b>	Isotope-Labeled Compounds; Endogenous Metabolite; DNA/RNA Synthesis
<b>Pathway:</b>	Others; Metabolic Enzyme/Protease; Cell Cycle/DNA Damage
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Uridine triphosphate-d <sub>13</sub> (UTP-d <sub>13</sub> dilithium; Uridine 5'-triphosphate-d <sub>13</sub> ) dilithium is deuterium labeled Uridine triphosphate (HY-107372). Uridine triphosphate (UTP; Uridine 5'-triphosphate) is a nucleotide that regulates the functions of the pancreas in endocrine and exocrine secretion, proliferation, channels, transporters, and intracellular signaling under normal and disease states.
<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]. Lamarca A, et al. Uridine 5'-triphosphate promotes in vitro Schwannoma cell migration through matrix metalloproteinase-2 activation. *PLoS One*. 2014 Jun 6;9(6):e98998.
- [3]. Choi JH, et al. Uridine triphosphate increases proliferation of human cancerous pancreatic duct epithelial cells by activating P2Y2 receptor. *Pancreas*. 2013 May;42(4):680-6.
- [4]. Yitzhaki S, et al. Uridine-5'-triphosphate (UTP) reduces infarct size and improves rat heart function after myocardial infarct. *Biochem Pharmacol*. 2006 Oct 16;72(8):949-55.
- [5]. Iwaki Y, et al. Enhancement of antibody production against rabies virus by uridine 5'-triphosphate in mice. *Microbes Infect*. 2014 Mar;16(3):196-202.

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

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