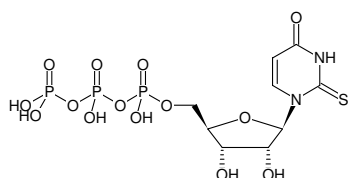


**2-Thio-UTP**s²UTP

2-Thio-UTP

2-Thiouridine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-1151S	10 µl (100 mM)
NU-1151L	5 x 10 µl (100 mM)



Structural formula of 2-Thio-UTP

For general laboratory use.**Shipping:** shipped on gel packs**Storage Conditions:** store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

Shelf Life: 12 months after date of delivery**Molecular Formula:** C₉H₁₅N₂O₁₄P₃S (free acid)**Molecular Weight:** 500.21 g/mol (free acid)**Exact Mass:** 499.95 g/mol (free acid)**CAS#:** 35763-29-2**Purity:** ≥ 95 % (HPLC)**Form:** solution in water**Color:** colorless to slightly yellow**Concentration:** 100 mM - 110 mM**pH:** 7.5 ± 0.5**Spectroscopic Properties:** λ_{max} 274 nm, ε 14.2 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)**Specific Ligands:**Ligand for purinergic receptors:Potent and selective agonist at P2Y₂ receptor and [1,2,3,4]**Related Products:**

HighYield T7 RNA Synthesis Kit, #RNT-101

Selected References:[1] Higgins *et al.* (2014) Nucleotides Regulate Secretion of the Inflammatory Chemokine CCL2 from Human Macrophages and Monocytes. *Mediators Inflamm.* 293925.[2] Zizzo M. *et al.* (2012) Pharmacological characterization of uracil nucleotide-preferring P2Y receptors modulating intestinal motility: a study on mouse ileum. *Purinergic Signal.* **8** (2):275.[3] Ko *et al.* (2008) Synthesis and potency of novel uracil nucleotides and derivatives as P2Y2 and P2Y6 receptor agonists. *Bioorg. Med. Chem.* **16** (12):6319.[4] El-Tayeb *et al.* (2006) Synthesis and structure-activity relationships of uracil nucleotide derivatives and analogues as agonists at human P2Y2, P2Y4, and P2Y6 receptors. *J. Med. Chem.* **49** (24):7076.Kormann *et al.* (2011) Expression of therapeutic proteins after delivery of chemically modified mRNA in mice. *Nature Biotechnology* **29**:154.Warren *et al.* (2010) Highly efficient reprogramming to pluripotency and directed differentiation of human cells with synthetic modified mRNA. *Cell Stem Cell* **7** (5):618.