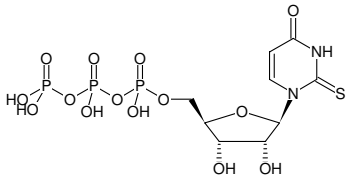
DATA SHEET

Jena Bioscience

2-Thio-UTP

s^2UTP
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 research use only!

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: $C_9H_{15}N_2O_{14}P_3S$ (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 $P2Y_2$ receptor [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.