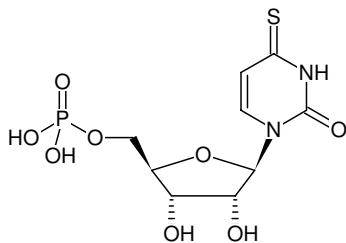




4-Thio-UMP

4-Thio-uridine-5'-monophosphate, Sodium salt

Cat. No.	Amount
NU-1154S	50 µl (10 mM)
NU-1154L	5 x 50 µl (10 mM)



Structural formula of 4-Thio-UMP

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: C₉H₁₃N₂O₉PS (free acid)

Molecular Weight: 340.24 g/mol (free acid)

Exact Mass: 340.01 g/mol (free acid)

CAS#: 4145-46-4

Purity: ≥ 95 % (HPLC)

Form: solution in water

Color: colorless to slightly yellow

Concentration: 10 mM - 11 mM

pH: 7.5 ±0.5

Spectroscopic Properties: λ_{max} 331 nm, ε 16.3 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)

Selected References:

Sohn *et al.* (2005) Sequential multiple functions of the conserved sequence in sequence-specific termination by T7 RNA polymerase. *Proc. Natl. Acad. Sci. USA* **102** (1):75.

Shen *et al.* (2001) Two site contact of elongating transcripts to phage T7 RNA polymerase at C-terminal regions. *J. Biol. Chem.* **276** (6):4080.

Powell *et al.* (1996) Elongation factor SII contacts the 3'-end of RNA in the RNA polymerase II elongation complex. *J. Biol. Chem.* **1271** (37):22301.

Sheng *et al.* (1993) Wheat germ and yeast RNA polymerase II: photoaffinity labeling by 4-thiouracil 5'-monophosphate positioned uniquely at the 3' end of an enzyme-bound [32P]-containing transcript. *Biochemistry* **32** (9):2248.

Khanna *et al.* (1991) Photoaffinity labelling of the pea chloroplast transcriptional complex by nascent RNA in vitro. *Nucleic Acids Res.* **19** (18):4849.

Kelly *et al.* (1990) Yeast RNA polymerase I. Derivatization of the 190 and 135 subunits by 4-thiouridine monophosphate positioned uniquely at the 3' terminus of an enzyme-bound 32P-containing transcript initiated by a triribonucleotide primer on synthetic single-stranded DNA. *J. Biol. Chem.* **265** (14):7787.

Shostak *et al.* (1990) Direct spectrophotometric assays for orotate phosphoribosyltransferase and orotidylate decarboxylase. *Anal. Biochem.* **191** (2):365.