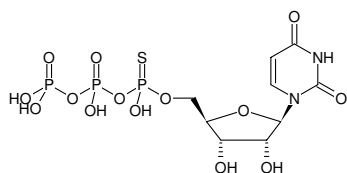


**UTP α S**Uridine-5'-(α -thio)-triphosphate, Sodium salt; (Mixture of R_p and S_p isomers)

| Cat. No. | Amount |
|----------|-------------------------|
| NU-411S | 25 μ l (100 mM) |
| NU-411L | 5 x 25 μ l (100 mM) |

Structural formula of UTP α S**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:** 500.20 g/mol (free acid)**Exact Mass:** 499.95 g/mol (free acid)**CAS#:** 71214-29-4**Purity:** \geq 95 % (HPLC)**Form:** solution in water**Color:** colorless to slightly yellow**Concentration:** 100 mM - 110 mM**pH:** 7.5 \pm 0.5**Spectroscopic Properties:** λ_{\max} 262 nm, ϵ 10.0 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)**Selected References:**Oyelere *et al.* (2002) pKa perturbation in genomic hepatitis delta virus ribozyme catalysis evidenced by nucleotide analogue interference mapping. *Biochemistry-US* **41** (11):3667.Basu *et al.* (2001) Biochemical detection of monovalent metal ion binding sites within RNA. *Methods* **23** (3):264.Oyelere *et al.* (2000) Biochemical detection of cytidine protonation within RNA. *J. Am. Chem. Soc.* **122** (42):10259.Vortler *et al.* (2000) Phosphorothioate modification of RNA for stereochemical and interference analyses. *Method. Enzymol.* **317**:74.Ryder *et al.* (2000) Chemical probing of RNA by nucleotide analog interference mapping. *Method. Enzymol.* **317**:92.Burgess *et al.* (2000) Syntheses of nucleoside triphosphates. *Chem. Rev.* **100** (6):2047.Ryder *et al.* (1999) Nucleotide analog interference mapping. *Methods* **18** (1):38.Strobel (1999) A chemogenetic approach to RNA function/structure analysis. *Curr. Opin. Struct. Biol.* **9** (3):346.Boudvillain *et al.* (1998) Defining functional groups, core structural features and inter-domain tertiary contacts essential for group II intron self-splicing: a NAIM analysis. *EMBO J.* **17** (23):7091.Basu *et al.* (1998) A specific monovalent metal ion integral to the AA platform of the RNA tetraloop receptor. *Nat. Struct. Biol.* **5** (11):986.Ortoleva-Donnelly *et al.* (1998) Identifying RNA minor groove tertiary contacts by nucleotide analogue interference mapping with N-2-methylguanosine. *Biochemistry-US* **37** (37):12933.Arabshahi *et al.* (1994) A simplified procedure for synthesizing nucleoside 1-thiotriphosphates - dATP (α)S, dGTP (α)S, UTP- α -S, and dTTP (α)S. *Biochem. Biophys. Res. Co.* **204** (1):150.