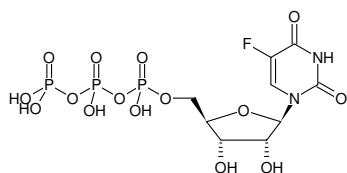


**5-Fluoro-UTP**

(5F-UTP)

5-Fluoro-uridine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-1115S	10 µl (100 mM)
NU-1115L	5 x 10 µl (100 mM)



Structural formula of 5-Fluoro-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:** C₉H₁₄N₂O₁₅P₃F (free acid)**Molecular Weight:** 502.13 g/mol (free acid)**Exact Mass:** 501.96 g/mol (free acid)**CAS#:** 3828-96-4**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} 267 nm, ε 10.0 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)**Applications:**Inhibition of viral application^[1]Mutagenic activity^[1]Conformational studies (NMR-NOE) of HIV-2 TAR-RNA^[2]Use as NMR-label (F)^[2]X-ray of viral RNA polymerase^[3]**Related Products:**

HighYield T7 P&L RNA NMR Kit (5F-UTP), #RNT-202

Selected References:

[1] Agudo *et al.* (2008) Molecular Characterization of a Dual Inhibitory and Mutagenic Activity of 5-Fluorouridine Triphosphate on Viral RNA Synthesis. Implications for Lethal Mutagenesis. *J. Mol. Biol.* **382**:652.

[2] Hennig *et al.* (2007) Synthesis of 5-fluoropyrimidine nucleotides as sensitive NMR probes of RNA structure. *J. Am. Chem. Soc.* **129**:14911.

[3] Ferrer-Orta *et al.* (2007) Sequential structures provide insights into the fidelity of RNA replication. *PNAS USA* **104**:9463.

Gilles Labesse *et al.* (2011) Structural and functional characterization of the Mycobacterium tuberculosis uridine monophosphate kinase: insights into the allosteric regulation. *Nucleic Acids Res.* **39** (8):3458.

Gilles *et al.* (2007) Regulatory Mechanisms Differ in UMP Kinases from Gram-negative and Gram-positive Bacteria. *J. Biol. Chem.* **282** (10):7242.

Au *et al.* (1982) Reversed-phase ion-pair high-performance liquid-chromatographic assay of 5-fluorouracil, 5'-deoxy-5- fluorouridine, their nucleosides, monophosphate, diphosphate, and triphosphate nucleotides with a mixture of quaternary ammonium-ions. *J. Chromatogr.* **228**:245.

Glazer *et al.* (1980) The effect of 5-fluorouridine 5'-triphosphate on RNA transcribed in isolated-nuclei invitro. *Mol. Pharmacol.* **17** (2):279.

Anukarahanonta *et al.* (1979) Enhancement of 5-fluorouridine action in hepatoma-cells by galactosamine-induced uridine triphosphate deficiency. *H-S.Z. Physiol. Chem.* **360** (3):225.