

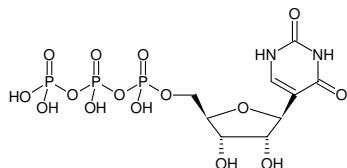


## Pseudo-UTP

$\Psi$ -UTP

Pseudouridine-5'-triphosphate, Sodium Salt

Cat. No.	Amount
NU-1139S	10 $\mu$ l (100 mM)
NU-1139L	5 x 10 $\mu$ l (100 mM)
NU-1139XL	100 $\mu$ l (100 mM)



Structural formula of Pseudo-UTP

**For general laboratory use.**

**Please centrifuge briefly before opening (volume  $\leq$  2 ml).**

**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:**  $C_9H_{15}N_2O_{15}P_3$  (free acid)

**Molecular Weight:** 484.14 g/mol (free acid)

**Exact Mass:** 483.97 g/mol (free acid)

**CAS#:** 1175-34-4

**Purity:**  $\geq$  99 % (HPLC)

**Form:** solution in water

**Color:** colorless to slightly yellow

**Concentration:** 100 mM - 110 mM

**pH:** 7.5  $\pm$  0.5

**Solubility:** water

**Spectroscopic Properties:**  $\lambda_{\text{max}}$  265 nm  $\pm$  2 nm,  $\epsilon$  7.9 L mmol $^{-1}$  cm $^{-1}$   
(Tris-HCl pH 7.5)

### Related Products:

HighYield T7 RNA Synthesis Kit, #RNT-101

### Selected References:

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Warren *et al.* (2012) Feeder-free derivation of human induced pluripotent stem cells with messenger RNA. *Sci Rep.* **2**:657.

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Warren *et al.* (2010) Highly Efficient Reprogramming to Pluripotency and Directed Differentiation of Human Cells with Synthetic Modified mRNA. *Cell Stem Cell.* doi:10.1016/j.stem.2010.08.012.

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Madore *et al.* (2000) Effect of modified nucleotides on Escherichia coli tRNAGlu structure and on its aminoacylation by glutamyl-tRNA synthetase. Predominant and distinct roles of the mnm5 and s2 modifications of U34. *Eur J Biochem.* **266** (3):1128.

Goldberg *et al.* (1963) Comparative utilization of pseudouridine triphosphate and uridine triphosphate by ribonucleic acid polymerase. *J. Biol. Chem.* **238** (5):1793.