DATA SHEET

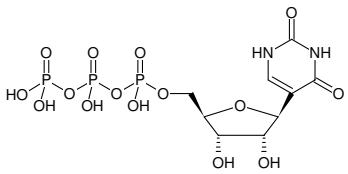
Jena Bioscience

Pseudo-UTP

Ψ-UTP

Pseudouridine-5'-triphosphate, Sodium Salt

Cat. No.	Amount
NU-1139S	10 µl (100 mM)
NU-1139L	5 x 10 µl (100 mM)



Structural formula of Pseudo-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: $C_9H_{15}N_2O_{15}P_3$ (free acid)

Molecular Weight: 484.14 g/mol (free acid)

Exact Mass: 483.97 g/mol (free acid)

CAS#: 1175-34-4

Purity: ≥ 95 % (HPLC)

Form: solution in water

Color: colorless to slightly yellow

Concentration: 100 mM - 110 mM

pH: 7.5 ±0.5

Solubility: water

Spectroscopic Properties: λ_{max} 265 nm ±2 nm, ε 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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Karikó *et al.* (2012) Increased Erythropoiesis in Mice Injected With Submicrogram Quantities of Pseudouridine-containing mRNA Encoding Erythropoietin. *Mol Ther.* **20 (5)**:984.

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

Anderson *et al.* (2011) Nucleoside modifications in RNA limit activation of 2'-5'-oligoadenylate synthetase and increase resistance to cleavage by RNase L. *Nucleic Acids Research.* **39 (21)**:9329.

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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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Belliot *et al.* (2005) Norovirus proteinase-polymerase and polymerase are both active forms of RNA-dependent RNA polymerase. *Journal of Virology.* **79 (4)**:2393.

Karikó *et al.* (2005) Suppression of RNA Recognition by Toll-like Receptors: The Impact of Nucleoside Modification and the Evolutionary Origin of RNA. *Immunity.* **23 (2)**:165.

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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.