

## Pseudo-UTP (100 mM)

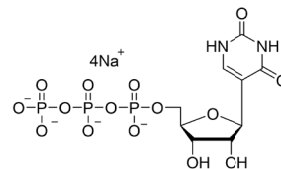
REF: EG21922S

### Storage Condition

-20°C

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Component	Amount
Pseudo-UTP (100 mM)	200 µl



Note: Avoid repeated freezing and thawing. It is recommended to aliquot upon first use.

### Description

Pseudouridine, discovered in 1951, is the first identified modified nucleoside in RNA and is considered the "fifth nucleoside" in RNA. It is widely present in tRNA, mRNA, snRNA, and snoRNA, and has extensive applications in nucleic acid therapeutics. Research by the Karikó group at the University of Pennsylvania has shown that replacing uridine with pseudouridine can significantly reduce the immunogenicity of in vitro transcribed mRNA, improve mRNA stability, and increase expression. This colorless and transparent liquid is primarily used in oligonucleotide aptamer, epigenetics or DNA damage research, in vitro transcription (IVT), mutagenesis induction, and photoreactive crosslinking studies.

### Product Details

**Shipping condition:** Blue ice/dry ice

**Purity:** ≥98% (HPLC)

**Salt type:** Na<sup>+</sup>

**Buffer:** Tris-HCl

**Concentration:** 100 mM±5%

**pH:** 8.0±0.5

**Solvent:** Water

**CAS number:** 1175-34-4 (free acid)

**Molecular formula:** C<sub>9</sub>H<sub>15</sub>N<sub>2</sub>O<sub>15</sub>P<sub>3</sub> (free acid); C<sub>9</sub>H<sub>11</sub>N<sub>2</sub>Na<sub>4</sub>O<sub>15</sub>P<sub>3</sub> (Sodium salt)

**Molecular weight:** 484.14 g/mol (free acid); 572.07 g/mol (Sodium salt)

Note: Animal derived component free. The product is for research use only.