

Product Data Sheet

Product Name: Pseudo-UTP,100mM Sodium Solution
Cat. No.: GB20001

Chemical Properties

Cas. No.
Formula C₉H₁₂N₂Na₃O₁₅P₃ M.Wt 550.085
Solubility Storage Store at -20°C
General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Protocol

Pseudo-UTP SINEUP RNA

1. RNA

1. RNA Pseudo-UTP UTP SINEUP RNA m6A Pseudo-UTP 100% GTP m7G RNA 5'

2. RNA DNase I DNA ATP RNA 200nt 37°C 30

3. SINEUP RNA 293T/17 48 Western Blot qRT-PCR RNA mRNA

1

1 Pseudo-UTP RNA

2

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

References:

[1] Valentini P, Pierattini B, Zacco E, et al. Towards SINEUP-based therapeutics: Design of an in vitro synthesized SINEUP RNA. Mol Ther Nucleic Acids. 2022 Feb 2;27:1092-1102.

Background

Pseudo-UTP, 100mM Sodium Solution is a modified uridine triphosphate nucleotide commonly used in the research and development of mRNA vaccines and therapeutic mRNAs. By incorporating into mRNA molecules in place of natural uridine, Pseudo-UTP can reduce the immunogenicity of mRNA while enhancing its stability and translational efficiency^[1-2].

References:

[1] Shanmugasundaram M, Senthilvelan A, Kore AR. Gram-Scale Chemical Synthesis of Base-Modified Ribonucleoside-5'-O-Triphosphates. Curr Protoc Nucleic Acid Chem. 2016 Dec 1;67:13.15.1-13.15.10.

[2] Tchigvintsev A, Tchigvintsev D, Flick R, et al. Biochemical and structural studies of conserved Maf proteins revealed nucleotide pyrophosphatases with a preference for modified nucleotides. Chem Biol. 2013 Nov 21;20(11):1386-98.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA