

PRODUCT INFORMATION



5-Bromouridine 5'-triphosphate (sodium salt)

Item No. 18140

Formal Name: 5-bromo-uridine 5'-(tetrahydrogen triphosphate), trisodium salt

Synonym: 5-BrUTP

MF: C₉H₁₁BrN₂O₁₅P₃ • 3Na

FW: 629.0

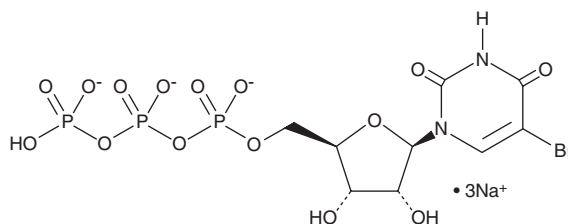
Purity: ≥95%

UV/Vis.: λ_{max}: 210, 280 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

5-Bromouridine 5'-triphosphate (sodium salt) is supplied as a crystalline solid. Aqueous solutions of 5-bromouridine 5'-triphosphate (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 5-bromouridine 5'-triphosphate (sodium salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

5-BrUTP is a brominated form of UTP that is used to label RNA during transcription. 5-BrUTP in newly-transcribed RNA is then evaluated immunologically with antibodies. This approach has been used to detect or measure RNA transcription with a variety of imaging and molecular methods.¹⁻⁵

References

1. Abe, K., Inoue, A., Suzuki, M.G., *et al.* Global gene silencing is caused by the dissociation of RNA polymerase II from DNA in mouse oocytes. *J. Reprod. Dev.* **56(5)**, 502-507 (2010).
2. Eskiw, C.H., Rapp, A., Carter, D.R.F., *et al.* RNA polymerase II activity is located on the surface of protein-rich transcription factories. *J. Cell Sci.* **121(Pt 12)**, 1999-2007 (2008).
3. Heinrich, B.S., Cureton, D.K., Rahmeh, A.A., *et al.* Protein expression redirects vesicular stomatitis virus RNA synthesis to cytoplasmic inclusions. *PLoS Pathog.* **6(6)**, 1-14 (2010).
4. Javed, A., Zaidi, S.K., Gutierrez, S.E., *et al.* In situ immunofluorescence analysis: Analyzing RNA synthesis by 5-bromouridine-5'-triphosphate labeling. *Methods Mol. Biol.* **285**, 29-31 (2004).
5. Thiry, M., Cheutin, T., O'Donohue, M.-F., *et al.* Dynamics and three-dimensional localization of ribosomal RNA within the nucleolus. *RNA* **6(12)**, 1750-1761 (2000).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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