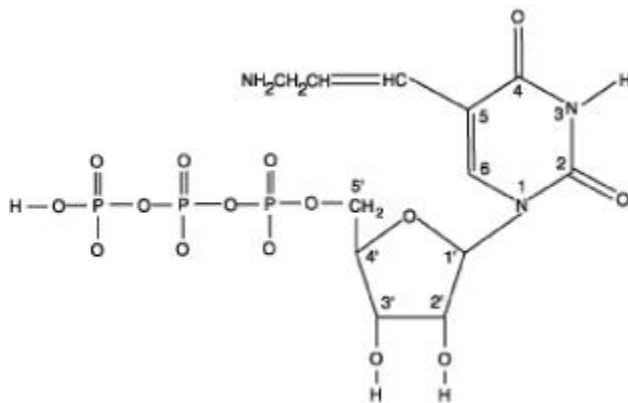


Modified Nucleotide

5-(3-aminoallyl)-UTP

Store at or below -70°C .
Do not store in a frost-free freezer.

Catalog #: AM8436
Volume: 25 μL
Concentration: 10 mM
Product Description: 5-(3-aminoallyl)-UTP
Structure:



Storage Conditions: Store at or below -70°C . Avoid multiple freeze-thaw cycles. Aliquots of the product may be stored short-term at -20°C . **Do not store in a frost-free freezer.**

Storage Buffer: 10 mM Tris-HCl pH 7.5

USER INFORMATION

General Information: When incorporated into RNA molecules, 5-(3-aminoallyl)-UTP provides a reactive group for addition of other chemical groups. The aminoallyl modification reacts with amine-reactive compounds such as N-hydroxysuccinimide (NHS) esters; thus aminoallyl modified RNA can be labeled with any moiety bearing an amine-reactive group. Aminoallyl nucleotide incorporation combined with a secondary dye coupling reaction is commonly used for the generation of probes for array analysis.

Applications: 5-(3-aminoallyl)-UTP is readily incorporated by T7 RNA polymerase. In general, use modified NTPs at a final concentration of 5 mM. RNA yield will depend on both the template sequence and on the modified nucleotide being incorporated. Amino allyl-modified NTPs are incorporated almost as efficiently as unmodified NTPs.

5-(3-aminoallyl)-UTP is compatible with MessageAmp™ II aRNA Kits (Cat #AM1751, AM1819) and Amino Allyl MessageAmp™ II aRNA Amplification Kits (Cat #AM1753, AM1795–AM1797).

QUALITY CONTROL

Nonspecific Endonuclease Activity: Meets or exceeds specification when a sample is incubated for 14–16 hr with 300 ng supercoiled plasmid DNA and analyzed by agarose gel electrophoresis.

Exonuclease Activity: Meets or exceeds specification when a sample is incubated for 14–16 hr with 40 ng ^{32}P -labeled *Sau3A* fragments of pUC19 and analyzed by PAGE.

RNase Activity: Meets or exceeds specification when a sample is incubated for 14–16 hr with 25 ng ^{32}P -labeled RNA and analyzed by PAGE.

Functional Testing: 5-(3-aminoallyl)-UTP is functionally tested in an in vitro transcription reaction. Reaction products are assessed by TCA precipitation and denaturing polyacrylamide gel analysis.

OTHER INFORMATION

Material Safety Data Sheets:

Material Safety Data Sheets (MSDSs) can be printed or downloaded from product-specific links on our website at the following address: www.ambion.com/techlib/msds. Alternatively, e-mail your request to MSDS_Inquiry_CCRM@appliedbiosystems.com. Specify the catalog or part number(s) of the product(s), and we will e-mail the associated MSDSs unless you specify a preference for fax delivery. For customers without access to the internet or fax, our technical service department can fulfill MSDS requests placed by telephone or postal mail. (Requests for postal delivery require 1–2 weeks for processing.)

Warranty and Liability:

For research use only. Not for use in diagnostic procedures.

Applied Biosystems is committed to delivering superior product quality and performance, supported by industry-leading global service and technical support teams. Warranty information for the accompanying consumable product is available at www.ambion.com/info/warranty in "Limited Warranty for Consumables," which is subject to the exclusions, conditions, exceptions, and limitations set forth under the caption "EXCLUSIONS, CONDITIONS, EXCEPTIONS, AND LIMITATIONS" in the full warranty statement. Please contact Applied Biosystems if you have any questions about our warranties or would like information about post-warranty support.

Information in this document is subject to change without notice. Applied Biosystems assumes no responsibility for any errors that may appear in this document.

Applied Biosystems disclaims all warranties with respect to this document, expressed or implied, including but not limited to those of merchantability or fitness for a particular purpose. In no event shall Applied Biosystems be liable, whether in contract, tort, warranty, or under any statute or on any other basis for special, incidental, indirect, punitive, multiple or consequential damages in connection with or arising from this document, including but not limited to the use thereof.

Trademarks, Patents, and Licensing:

Applied Biosystems, AB (Design), and Ambion are registered trademarks, and MessageAmp is a trademark of Applied Biosystems Corporation or its subsidiaries in the US and/or certain other countries. All other trademarks are the sole property of their respective owners.

© 2007 Ambion, Inc. All rights reserved. 4386607A