

# 50mM dUTP Mix

Shipping: On Dry/Blue Ice

Catalog numbers

Batch No.: See bottle

BIO-39041 25µmol 1 x 500 µL



A Meridian Life Science® Company

Store at -20 °C

## Storage and stability:

dUTP Mix is shipped on dry/blue ice. On arrival store at -20 °C for optimum stability. Repeated freeze/thaw cycles should be avoided. For long-term storage, aliquoting is recommended.

## Expiry:

When stored under the recommended conditions and handled correctly, quality is retained until the expiry date on the outer box label.

## Safety precautions:

Please refer to the material safety data sheet for information.

## Quality control specifications:

dUTP Mix is extensively tested for contamination prior to release. dNTPs are >99% pure by HPLC and are free of DNase, RNase, Protease, phosphatase and nicking activity. Lithium salts, >99% deoxynucleoside triphosphates (HPLC, area %), <1% deoxynucleoside mono-phosphates and deoxynucleoside diphosphates.

## Description

A ready-to-use molecular grade dUTP Mix containing 10mM dATP, dCTP, dGTP and 20mM dUTP at pH 7.5 as lithium salts in purified water. The mix is designed to save hands-on time for researchers and minimize the possibility of contamination. For use in DNA polymerization reactions, DNA labeling and sequencing processes. Dependable PCR grade.

All Bioline dUTPs are supplied as lithium salts in purified water at pH 7.5. Lithium salts have greater resistance to repeated freezing and thawing cycles than sodium salts, and lithium salt dNTP preparations remain sterile over the entire shelf-life due to the bacteriostatic activity of lithium towards various microorganisms.

This reagent has been manufactured under 13485 Quality Management System and is suitable for further manufacturing use as an IVD component.

## Features

- Convenient, pre-optimized and pre-mixed
- Ultra-pure: >99% triphosphate by HPLC
- Extended shelf-life of 24 months at -20 °C
- Free from PCR inhibitors
- DNase, RNase and Nickase free
- Manufactured by Bioline in a purpose-built facility

## Applications

- Standard and long range PCR assays
- cDNA synthesis
- qPCR
- Microarrays
- DNA sequencing
- Labeling

## Components of mix

dATP	5 µmol
dGTP	5 µmol
dCTP	5 µmol
dUTP	10 µmol
<b>Total</b>	<b>25 µmol</b>

## dNTP Characteristics

dNTPs	Mol. Wt	Molar Extinction(1µmol)
dATP	514.9	15.4 (A <sub>259</sub> )
dGTP	530.9	13.7 (A <sub>252</sub> )
dCTP	490.9	9.1 (A <sub>272</sub> )
dUTP	491.9	9.6 (A <sub>262</sub> )

## Reaction Guidelines

Pre-mixed to provide a 2:1 dUTP:dNTP ratio, for ideal incorporation of dUTP by DNA polymerase. Use 1 µL per 50 µL reaction.

## Associated products

Product Name	Pack Size	Catalog No.
HyperLadder™ 1kb	200 Lanes	BIO-33025

## Product citations

1. Konstantou, J.K., *et al. Eur. J. Hum. Gene.* **17**, 105-111 (2009).
2. Lontos, M., *et al. Am. J. Pathol.* **175**, 376-391 (2009).
3. Dyson, M.R., *et al. NAR* **36(9)**, e51 (2008).
4. Brown, J.T., *et al. BMC Med. Gen.* **7(69)**, (2006).
5. Pass, M.A., *et al. J. Clin. Microbiol.* **38(5)**, 2001-2004 (2000).

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