dCTP, 100mM Product Handling Guide		Storage and stability: dCTP, 100mM is shipped on dry or blue ice. On arrival store at -20 °C for optimum stability. Repeated freeze/thaw cycles should be avoided. Thawing during transportation does not affect the product performance. For long-term storage, aliquoting is recommended.	
		Expiry: When stored under the recommended conditions and handled correctly, full activity of the kit is	
Shipping:	On Dry or Blue Ice	retained until the expiry date on the outer box label.	
Catalog number:	MDX047	Safety precautions: Read and understand the SDS (Safety Data Sheets) before handling the reagents. Hardcopies of the SDS will be provided with the first shipment, thereafter they will be available upon request.	
Batch No.:	See vial	Quality control:	
Concentration:	100 mM Store at –20 °C	Bioline operates under ISO 13485 Quality Management System. dCTP, 100mM and its components are extensively tested for activity, processivity, efficiency, heat activation, sensitivity, absence of nuclease contamination and absence of nucleic acid contamination.	
		Notes: This reagent has been manufactured under 13485 Quality Management System and is suitable for further manufacturing use as an IVD component.	

Description

Sequencing grade ultra-pure dNTPs are enzymatically synthesized from premium quality raw materials, using highly specific production systems in our purpose built facilities. The manufacturing process eliminates impurities and PCR-specific inhibitors such as modified nucleotides, tetraphosphates and pyrophosphates commonly observed in other commercially available dNTP products (>99% purity determined by quantitative HPLC).

All dNTPs 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.

Kit components

Table 1

Component

dCTP

dCTP Characteristics

Name:	2'-deoxycytidine-5'-triphosphate solution
Formulation:	C ₉ H ₁₂ N ₃ O ₁₃ P ₃ Li ₄
Molecular weight:	490.9 g/mol

SPECTRAL & HPLC ANALYSIS	PERFORMANCE
λ max pH 7.0	272 nm
ε at λmax	9.1 E x mmol ⁻¹ x cm ⁻¹
A ₂₅₀ /A ₂₆₀	0.82 ± 0.03
A ₂₈₀ /A ₂₆₀	0.98 ± 0.02
Concentration	100mM ± 5%
Appearance	Clear Colorless Solution
pH of Solution	7.5
dNTP (HPLC Area)	≥ 99%
dNDP (HPLC Area)	< 1%
DNases, RNases, Nicking Activity	Negative

Related Products	Cat. No.
dATP, 100mM	MDX046
dGTP, 100mM	MDX048
dTTP, 100mM	MDX049
dUTP, 100mM	MDX059
dNTP Set, 100mM	MDX050
dNTP Mix, 100mM	MDX051
dNTP Mix, 40mM	MDX057
dUTP Mix, 100mM	MDX058
Low DNA Taq HS 5 U/µL	MDX009

Technical Support

For any technical enquiries, please contact our Technical Support team via email at: mbi.tech@meridianlifescience.com

Bioline Reagents Ltd UNITED KINGDOM

Tel: +44 (0)20 8830 5300 Fax: +44 (0)20 8452 2822 Bioline USA Inc. USA Tel: +1 901 382 8716

Fax: +1 901 382 0027

GERMANY Tel: +49 (0)33

Bioline GmbH

Tel: +49 (0)337 160222 00 Fax: +49 (0)3371 60222 01 Bioline (Aust) Pty. Ltd AUSTRALIA Tel: +61 (0)2 9209 4180 Fax: +61 (0)2 9209 4763 Bioline France FRANCE Tel: +33 (0)1 42 56 04 40 Fax: +33 (0)9 70 06 62 10