

dNTPs Set

Cat # NB-60-0004 Size: 100 mM, 4 × 250 µL

Description

dNTP Set consists in a series of separate ready-to-use molecular grade dNTP solutions of dATP, dGTP, dCTP, and dTTP, at pH 8.5 (at 22 °C) and a 100 mM concentration. The dNTPs are supplied in a sodium salt solution and may be used in DNA polymerization reactions, DNA labelling and sequencing processes.

Features

Ultra-pure: >99% trisphosphate by HPLC
Extended shelf-life of 24 months at -20 °C

dNTPs Specifications

Free from PCR inhibitors
DNase, RNase and Nickase free

Applications

Standard and long-range PCR
cDNA synthesis
Real-time PCR
Microarrays
DNA sequencing & DNA labelling

Storage conditions

dNTP Set can be stored for 24 months at -20 °C. Avoid multiple freeze/thaw cycles. For long-term storage, aliquoting is highly recommended.

Storage conditions

4 °C to dry ice.

- CAUTION - Not fully tested. For Research use only. Not for human use. –

dNTPs Specifications

Product	dATP 100 mM, Sodium salt solution	dCTP 100 mM, Sodium salt solution	dGTP 100 mM, Sodium salt solution	dTTP 100 mM, Sodium salt solution
Nomenclature	2'-deoxyadenosine-5'-triphosphate	2'-deoxycytidine-5'-triphosphate	2'-deoxyguanosine-5'-triphosphate	2'-deoxythymidine-5'-triphosphate
Formula	C ₁₀ H ₁₃ N ₅ O ₁₂ P ₃	C ₉ H ₁₃ N ₃ O ₁₃ P ₃	C ₁₀ H ₁₃ N ₅ O ₁₃ P ₃	C ₁₀ H ₁₄ N ₂ O ₁₄ P ₃
Molecular weight	488.16 g mol ⁻¹	464.13 g mol ⁻¹	504.16 g mol ⁻¹	465.14 g mol ⁻¹
λ_{max} pH @ 7.0	259 nm	271 nm	252 nm	267 nm
ε at λ_{max} pH @ 7.0	15.1 E x mmol ⁻¹ .cm ⁻¹	8.9 E x mmol ⁻¹ .cm ⁻¹	14.2 E x mmol ⁻¹ .cm ⁻¹	9.5 E x mmol ⁻¹ .cm ⁻¹
A₂₅₀/A₂₆₀	0.78 ± 0.02	0.82 ± 0.02	1.15 ± 0.03	0.64 ± 0.02
A₂₈₀/A₂₆₀	0.15 ± 0.02	0.97 ± 0.02	0.67 ± 0.02	0.74 ± 0.02
Concentration	100 mM ± 2%	100 mM ± 2%	100 mM ± 2%	100 mM ± 2%
Appearance	clear colourless	clear colourless	clear colourless	clear colourless
pH at 22 °C	8.5	8.5	8.5	8.5
dNTP (HPLC Area)	≥ 99%	≥ 99%	≥ 99%	≥ 99%
dNDP (HPLC Area)	<0.9%	<0.9%	<0.9%	<0.9%
dNMP (HPLC Area)	<0.5%	<0.5%	<0.5%	<0.5%
Dnases, RNases, Nicking activity	Negative	Negative	Negative	Negative
Proteases	Negative	Negative	Negative	Negative
Storage	At -20 °C	At -20 °C	At -20 °C	At -20 °C
Stability	24 months	24 months	24 months	24 months

- CAUTION - Not fully tested. For Research use only. Not for human use. –