dNTPs NZYSet

Catalogue number:
MB08701, 100 mM, 4 × 250 µL

Description

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

Shipping conditions

4 °C to dry ice.

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	$C_{10}H_{13}N_5O_{12}P_3$	$C_9H_{13}N_3O_{13}P_3$	$C_{10}H_{13}N_5O_{13}P_3$	$C_{10}H_{14}N_2O_{14}P_3$
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 $mmol^{-1}.cm^{-1}$
A_{250}/A_{260}	0.78 ± 0.02	0.82 ± 0.02	1.15 ± 0.03	0.64 ± 0.02
A_{280}/A_{260}	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

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For research use only.

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