

Truin Science Ltd.

dNTP Set

(4x25µmol)

Cat. # RTS5012

- 0.25ml of 100mM dATP
- 0.25ml of 100mM dCTP
- 0.25ml of 100mM dGTP
- 0.25ml of 100mM dTTP

***Store at -20°C**

*For research purposes only.

Description

The set consists of 100mM aqueous solutions of dATP, dCTP, dGTP and dTTP, each supplied in a separate vial. Since the nucleotides are provided separately, the dNTP set offers maximum flexibility in preparation of reaction mixes for different applications.

Applications

For use in PCR, long PCR, RT-PCR, cDNA synthesis, primer extension, DNA sequencing and DNA labeling reactions.

Product Use Limitation

This product is developed, designed and sold exclusively for research purposes and in vitro use only. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.

Important Note

Mix each dNTP solution prior to use.

Preparation of dNTP mixtures from dNTP set

dNTP mixture to be prepared	Volumes of dNTP Set, µl				Water, Nuclease-free, µl	Total volume of dNTP mixture, µl
	100mM dATP	100mM dGTP	100mM dCTP	100mM dTTP		
2mM of each dNTP	10 100 250	10 100 250	10 100 250	10 100 250	400 4600 11500	500 5000 12500
10mM of each dNTP	10 100 250	10 100 250	10 100 250	10 100 250	60 600 1500	100 1000 2500
25mM of each dNTP	10 100 250	10 100 250	10 100 250	10 100 250	- - -	40 400 1000

Getting 0.2mM dNTP for PCR

Volume of PCR mixture	dNTP Mixture to be added to PCR		
	2mM	10mM	25mM
25µl	2.5µl	0.5µl	0.2µl
50µl	5µl	1µl	0.4µl
100µl	10µl	2µl	0.8µl

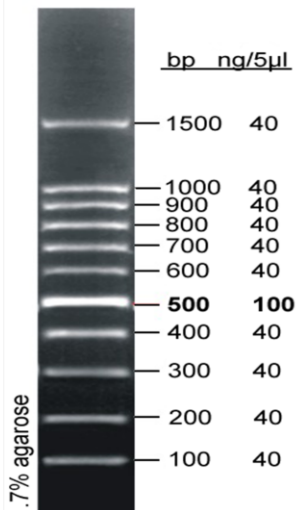
Method	Specification	Result
Purity Assay		
HPLC column c18; detection UV (at corresponding λ _{max}); mobile phase : A=TEAA 0.1M, pH 7.0; B=60% CH ₃ CN/A)	>99%	dATP 99.2% dCTP 99.0% dGTP 99.0% dTTP 99.4%
LO test(test for detection of exo-, endo-deoxyribonuclease and phosphatase contaminants)	Not Detectable	Passed
Ribonuclease assay (test for detection of RNase contaminants using [³ H]-RNA as a substrate)	Not Detectable	Passed
Functional Assay		
PCR with <i>Pfu</i> and <i>Taq</i> DNA Polymerase	Production of 1000 bp PCR fragment from 2ng of genomic DNA	Passed
pH 7.0-7.5		
Concentration		
Spectrophotometry	100±5mM	dATP 100mM dCTP 100mM dGTP 99mM dTTP 100mM

Other Recommended Products

Ready Load - 100bp Ladder

Cat. # RTS6010

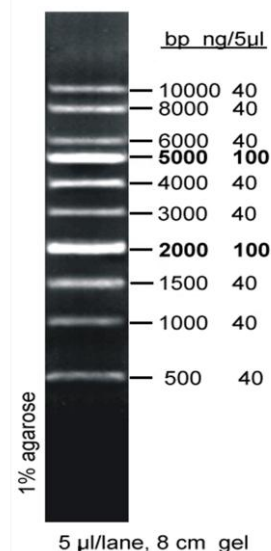
100 bp Ladder



Ready Load – 1 kb Ladder

Cat. # RTS6020

1 kb Ladder



TruPfu DNA Polymerase

(250 U) 2.5U/µl

Cat. # ETS4020

TruTaq DNA Polymerase

500 U (100µl) 5U/µl

Cat. # ETS4010