# **dNTP Mix**

(Contains 10 mM of each dNTPs)

Catalog No.	Concentration	Size
NT01-01	10 mM of dATP, dCTP, dGTP and dTTP	1 x 500 µl
NT01-02	10 mM of dATP, dCTP, dGTP and dTTP	4 x 500 μl
NT01-03	10 mM of dATP, dCTP, dGTP and dTTP	10 x 500 μl

**Description:** PCR Nucleotide Mix is a premixed solution containing the sodium salts of dATP, dCTP, dGTP and dTTP, each at a concentration of 10 mM in purified water; the total concentration of nucleotides is 40mM (pH 7.5). This solution is ready to use and is optimized for standard polymerase chain reactions, DNA labeling and sequencing processes.

## **Applications**

- Standard and specialty PCR amplifications
- cDNA synthesis
- qPCR
- Microarrays
- DNA sequencing
- Labeling reactions

**Physical Purity:** The individual dNTPs contained in the dNTP mix each contain ≥99.0% triphosphate as measured by HPLC.

#### **Molecular Weight**

dATP: 557.2 g/mol dCTP: 533.1 g/mol dTTP: 548.1 g/mol

#### **Storage Conditions**

- Store at -20°C.
- The shelf life is one year from date of receipt under proper storage conditions.
- Avoid freeze/thaw cycles or exposure to frequent temperature changes. It is recommended to aliquot for long term storage
- Mix well prior to use.

**Shipping Condition:** Blue ice (4°C)

### dNTP Mix Reaction Guideline

Reaction Volume	dNTP mix	Final Concentration
50 μΙ	1 µl	200 μM of each dNTP
25 μΙ	0.5 µl	200 μM of each dNTP

## **Standard PCR Composition**

Component	Volumes	Final Concentration
10X Reaction Buffer (with 15mM MgCl2)	5 µl	1X
40 mM Nucleotide Mix (10mM each dNTP)	1 µl	*800µM
Upstream primer, 20µM	0.25-2.5 µl	0.1–1µM
Downstream primer, 20µM	0.25-2.5 µl	0.1–1µM
Taq DNA Polymerase, 5U/μΙ	0.25-0.50 µl	0.025-0.05 U/µl
Template DNA	Χμl	<250ng
Nuclease-Free Water to final volume of	50 µl	

<sup>\*</sup>The final concentration of each dNTP is 200µM.

