

## dNTP Bundle

4x 100 mM (dATP, dCTP, dGTP, dTTP)

Cat. No.	Amount
NU-1005S	4x 200 $\mu$ l
NU-1005L	4x 1 ml

For *in vitro* use only

Quality guaranteed for 12 months

Store at -20°C, short term (up to one week) exposure to ambient temperature possible

### Concentration

100 mM +/-2%

### Form

clear aqueous solution, pH 8.5 +/-0.1 (4°C)

### Purity

>99%

### Quality Control Specifications

18 kb long range PCR (template dilution series): suitable

contamination with bacterial and human DNA: not detectable

activity of DNase, Protease or Phosphatase: not detectable

### Description

dNTP Bundle contains four separate solutions of ultrapure dATP, dCTP, dGTP, and dTTP supplied as clear aqueous solutions (pH 8.5).

### dATP

2'-Deoxyadenosine 5'-triphosphate, sodium salt

Molecular formula:  $C_{10}H_{13}N_5O_{12}P_3$  (Anion)

Molecular weight: 488.16 (Anion)

### dCTP

2'-Deoxycytidine 5'-triphosphate, sodium salt

Molecular formula:  $C_9H_{13}N_3O_{13}P_3$  (Anion)

Molecular weight: 464.13 (Anion)

### dGTP

2'-Deoxyguanosine 5'-triphosphate, sodium salt

Molecular formula:  $C_{10}H_{13}N_5O_{13}P_3$  (Anion)

Molecular weight: 504.16 (Anion)

### dTTP

2'-Deoxythymidine 5'-triphosphate, sodium salt

Molecular formula:  $C_{10}H_{14}N_2O_{14}P_3$  (Anion)

Molecular weight: 479.14 (Anion)

### Selected References:

Erlich et al. (1988) Primer-directed enzymatic amplification of DNA with a thermostable DNA polymerase. *Science* **29** (239):487.

Gelfand et al. (1991) Detection of specific polymerase chain reaction product by utilizing the 5'-3' exonuclease activity of *Thermus aquaticus* DNA polymerase. *Proc. Natl. Acad. Sci. USA* **88** (16):7276.

Sanger et al. (1977) DNA sequencing with chain-terminating inhibitors. *Proc. Natl. Acad. Sci. USA* **74**:5463.