

**dNTP Mix - 25 mM Solution**

Equimolar Mix of 25 mM dATP, dCTP, dGTP and dTTP

2'-Deoxyadenosine-5'-triphosphate, Sodium salt; 2'-Deoxycytidine-5'-triphosphate, Sodium salt; 2'-Deoxyguanosine-5'-triphosphate, Sodium salt; 2'-Deoxythymidine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-1023S	1 ml
NU-1023L	5x 1 ml
NU-1023-10ML	10 ml
NU-1023-100ML	100 ml
NU-1023-200ML	200 ml

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Shelf Life: 12 months

Molecular Formula:

dATP: $C_{10}H_{16}N_5O_{12}P_3$ (free acid)

dCTP: $C_9H_{16}N_3O_{13}P_3$ (free acid)

dGTP: $C_{10}H_{16}N_5O_{13}P_3$ (free acid)

dTTP: $C_{10}H_{17}N_2O_{14}P_3$ (free acid)

Molecular Weight:

dATP: 491.18 g/mol (free acid)

dCTP: 467.15 g/mol (free acid)

dGTP: 507.18 g/mol (free acid)

dTTP: 482.17 g/mol (free acid)

Purity: $\geq 99\%$ (HPLC)

Form: clear aqueous solution

pH: 8.5 ± 0.2 (22 °C)

Applications:

For standard PCR applications a final concentration of 200 μ M each dNTP is recommended.

Description:

dNTP Mix is an equimolar mixture of ultrapure dATP, dCTP, dGTP, and dTTP supplied as clear aqueous solution (pH 8.5).

Quality Control Specifications:

Low Copy Long Range PCR (18 kb, lambda DNA, template dilution series): PCR fragment with 50 pg of template

RT-PCR (749 bp fragment, human GAPDH gene, template dilution series): PCR fragment with 10 pg of template

Contamination with bacterial or human DNA: not detectable

DNases, RNases, Nicking Activity: not detectable

Proteases: not detectable

Selected References:

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

Holland *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.