



### dNTP Mix - 10 mM Solution

Equimolar Mix of 10 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-1006S	1 ml
NU-1006L	5x 1 ml
NU-1006-10ML	10 ml
NU-1006-100ML	100 ml

**For general laboratory use.**

**Shipping:** shipped on gel packs

**Storage Conditions:** store at -20 °C

**Shelf Life:** 12 months

**Molecular Formula:**

dATP: C<sub>10</sub>H<sub>16</sub>N<sub>5</sub>O<sub>12</sub>P<sub>3</sub> (free acid)

dCTP: C<sub>9</sub>H<sub>16</sub>N<sub>3</sub>O<sub>13</sub>P<sub>3</sub> (free acid)

dGTP: C<sub>10</sub>H<sub>16</sub>N<sub>5</sub>O<sub>13</sub>P<sub>3</sub> (free acid)

dTTP: C<sub>10</sub>H<sub>17</sub>N<sub>2</sub>O<sub>14</sub>P<sub>3</sub> (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:** ≥ 99 % (HPLC)

**Form:** clear aqueous solution

**pH:** 8.5 ± 0.2 (22 °C)

**Applications:**

For standard PCR applications a final concentration of 200 µM 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 or less

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

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.