

# dNTP Mix incl. dUTP

Premix of 10 mM dATP, dCTP, dGTP and dTTP and 20 mM dUTP

	Cat. No.	Volume	Amount
	DMIXU_100ML	100 ml	2 mmol dUTP 1 mmol other dNTPs
	DMIXU_1000ML	1000 ml	20 mmol dUTP 10 mmol other dNTPs

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

## dATP

2'-Deoxyadenosine 5'-triphosphate, sodium salt

Molecular formula: C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>12</sub>P<sub>3</sub> (Anion)

Molecular weight: 488.16 g/mol (Anion)

## dCTP

2'-Deoxycytidine 5'-triphosphate, sodium salt

Molecular formula: C<sub>9</sub>H<sub>13</sub>N<sub>3</sub>O<sub>13</sub>P<sub>3</sub> (Anion)

Molecular weight: 464.13 g/mol (Anion)

## dGTP

2'-Deoxyguanosine 5'-triphosphate, sodium salt

Molecular formula: C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>13</sub>P<sub>3</sub> (Anion)

Molecular weight: 504.16 g/mol (Anion)

## dUTP

2'-Deoxyuridine 5'-triphosphate, sodium salt

Molecular formula: C<sub>9</sub>H<sub>12</sub>N<sub>2</sub>O<sub>14</sub>P<sub>3</sub> (Anion)

Molecular weight: 465.12 g/mol (Anion)

## Form

clear aqueous solution

## pH

8.5 ± 0.2 (22 °C)

## Purity

≥ 99 % (HPLC)

## Description

dNTP Mix incl. dUTP is a mixture of 10 mM ultrapure dATP, dCTP, and dGTP, and 20 mM dUTP supplied as clear aqueous solution (pH 8.5). dUTP can be used in place of dTTP in PCR and RT-PCR protocols to prevent carry-over contaminations from previous amplifications.

## Selected References

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

[2] 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.

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