

dNTP Mix, PCR Grade / 10 mM

Premix of 10 mM dATP, dCTP, dGTP and dTTP

Deoxynucleotides

	Cat. No.	Size	Conc.
	NU-1006S	200 µl	10 mM each
	NU-1006L	1 ml	10 mM each

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

Description

dNTP Mix, PCR Grade / 10 mM is an equimolar mixture of 10 mM dATP, dCTP, dGTP and dTTP supplied as ultrapure aqueous solution and suitable for all molecular biology applications including PCR/qPCR, reverse transcription, DNA labeling and DNA sequencing.

Appearance

clear colorless solution

pH (4°C)

8.5 ± 0.1

Purity (HPLC area)

dNTP ≥ 99.0%

dNDT ≤ 0.9%

dNMP ≤ 0.5%

Application for PCR

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

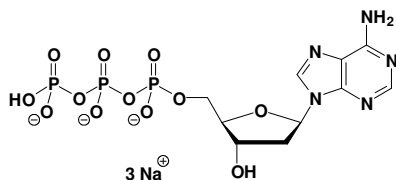
50 µl PCR assay			
dNTP Mix (10 mM each)	0.5 µl	1.0 µl	2.5 µl
final dNTP conc.	100 µM	200 µM	500 µM

dATP

2'-Deoxyadenosine 5'-triphosphate, sodium salt

Molecular formula: C₁₀H₁₃N₅O₁₂P₃ (Anion)

Molecular weight: 488.16 g·mol⁻¹

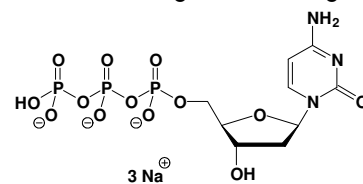


dCTP

2'-Deoxycytidine 5'-triphosphate, sodium salt

Molecular formula: C₉H₁₃N₃O₁₃P₃ (Anion)

Molecular weight: 464.13 g·mol⁻¹

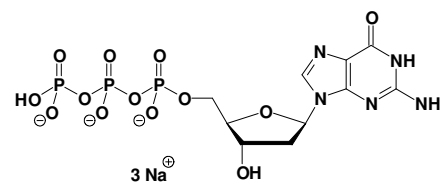


dGTP

2'-Deoxyguanosine 5'-triphosphate, sodium salt

Molecular formula: C₁₀H₁₃N₅O₁₃P₃ (Anion)

Molecular weight: 504.16 g·mol⁻¹

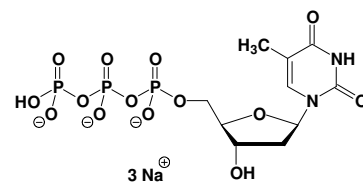


dTTP

2'-Deoxythymidine 5'-triphosphate, sodium salt

Molecular formula: C₁₀H₁₄N₂O₁₄P₃ (Anion)

Molecular weight: 479.14 g·mol⁻¹



Low Copy Long Range PCR (18 kb, lambda DNA, template dilution series)

PCR fragment with 100 pg of template or less

RT-PCR (600 bp fragment, human GAPDH gene)

PCR fragment with 100 pg of template or less

Contamination with bacterial or human DNA

not detectable

DNases, RNases, Nicking Activity

not detectable

Proteases

not detectable