Certificate of Analysis

dNTP Mixture [mixture of dATP, dCTP, dGTP, dTTP]

Cat. No. **32292** 2.5 mM / each (2 ml)

DESCRIPTION

dNTP Mixture is a ready-to-use solution consisting of the following compounds; 2.5 mM per each of dATP, dCTP, dGTP and dTTP which are dissolved aqueous solutions at pH 7.0

- · Mixture of 2.5 mM each dNTP (Total 10mM, 2 ml)
- · dATP, dGTP, dCTP, and dTTP
- · Dissolved in ultra-pure water, pH 7.0
- · No DNase and RNase detected

CHARACTERISTICS

- · Purity more than 98%
- · Ready to use without any handlings
- Substrate for DNA polymerase
- · The recommended amount of dNTP mixture in PCR reaction is a concentration of 50-200 mM.

STORAGE

Store at -20°C. Stable for more than 1 year at -20°C. After thawing, freshly use. We recommend to aliquot to small volume of dNTP Mixture and then stored at -20°C

KIT CONTENTS

Contents	Size
dNTP Mixture	1 ml x 2 vials (1 ml x 2.5 mM / tube)

APPLICATION

- All molecular biology applications
- PCR, long PCR, real-time PCR, high fidelity PCR, RT-PCR
- cDNA synthesis
- Primer extension
- DNA sequencing and DNA labeling.

QUALITY CONTROL

- 1) Functionally tested in PCR with Tag and Pfu DNA Polymerases.
- 2) Free of endodeoxyribonuclease, exodeoxyribonuclease, ribonuclease and phosphatase activities

FORMULATION

- 1) dATP (2'-deoxyadenosine-5'-triphosphate, disodium salt, trihydrate) $C_{10}H_{14}N_5O_{12}P_3Na_2 • 3H_2O$ MW: 589.20
- 2) dCTP (2'-deoxycytidine-5'-triphosphate, trisodium salt, dihydrate)

 $C_9H_{13}N_3O_{13}P_3Na_3 \bullet 2H_2O$

MW: 569.03

3) dGTP (2'-deoxyguanosine-5'-triphosphate, trisodium salt, dihydrate) $C_{10}H_{13}N_5O_{13}P_3Na_3 \cdot 2H_2O$

MW: 609.00

4) dTTP (2'-deoxythymidine-5'-triphosphate, trisodium salt, dihydrate) C₁₀H₁₃N₂O₁₄P₃Na₃•2H₂O

MW: 583.12