dUTP, 100 mM

Description: DNA molecules are built of dNTPs which are used in various PCR-based assays. The purity of dNTPs is highly important for the accuracy of assay results. The dNTPs synthesis itself doesn't except the presence of contaminants (such as NTPs, modified nucleotides, dNDPs, dNMPs, heavy/transition metals) in resulting solution, which can extremely affect the experiment by PCR inhibition.

The use of a highly purified dNTP preparation is particularly recommended for sensitive techniques such as long-range PCR, RT-PCR, multiplex, mutagenesis experiments and Real Time PCR applications.

dUTP may be used in place of dTTP in PCR and RT-PCR protocols to prevent carryover from previous amplifications. The substitution of dTTP for dUTP in PCR results in uracil-containing PCR products that are suitable for most standard applications. The enzyme uracil-DNA-glycosylase, UDG, can be added to a PCR premix to excise uracil from any contaminating PCR product, thereby preventing false positives.

Content

Ref No.	109001	109004	color
dUTP, 100 mM	**200 µL**	**1000 µL**	**black**
Datasheet	**1**	**1**	**--**

Applications: Many applications where high-quality reagents are required like reverse transcription (RT), polymerase chain reaction (PCR), RT-PCR, DNA labeling reactions, sequencing/cycle sequencing analysis.

Concentration: In water of sodium salts of dUTP 100 mM, pH 7.5

Quality Control

- HPLC analysis (> 98 %);
- NMR analysis (inorganic phosphates)
- Exo-endonucleases contamination test
- UV-spectral analysis
- Spectrophotometry
- Production of 8 kb PCR fragment from genomic DNA with *Taq* DNA polymerase
- Production of 0.6 kb PCR fragment from genomic DNA with *Pfu* DNA polymerase

Storage condition: -20 °C

Note: The solution is ready-for-use and is optimized for PCR. Use 200 µM of dUTP solution in the PCR reaction volume.