Set of 3 + 1 dNTPs with 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 set consists of **4 x 100 mM** aqueous solutions of dATP, dCTP, dGTP and dUTP each supplied in a separate vial.

In PCR and RT-PCR protocols dUTP can be used instead of dTTP 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 the PCR premix to excise uracil from any contaminating PCR product, thereby preventing false positive products.

Content

Ref No.	110014	110015	color
dATP *, 100 mM	**200 µL**	**1000 µL**	**white**
dCTP **, 100 mM	**200 µL**	**1000 µL**	**purple**
dGTP *, 100 mM**	**200 µL**	**1000 µL**	**yellow**
dUTP **, 100 mM**	**200 µL**	**1000 µL**	**black**
Datasheet	**1**	**1**	**--**

* dATP Na_4 * 3 H_2O, MW 634, 2'-Deoxyadenosine 5'-triphosphate, tetrasodium salt, Purity: 98.7 % (HPLC)

** dCTP Na_4 * 3 H_2O, MW 609, 2'-Deoxycytidine 5'-triphosphate, tetrasodium salt, Purity: 98.9 % (HPLC)

*** dGTP Na_4 * 3 H_2O, MW 649, 2'-Deoxyguanosine 5'-triphosphate, tetrasodium salt, Purity: 98.7 % (HPLC)

**** dUTP Na_4 * 3 H_2O, MW 468,2'-Desoxyuridine 5'-triphosphate, tetrasodium salt, Purity: 98.8 % (HPLC)

Applications: The deoxynucleotides are suitable for many applications where high-quality reagents are required. Such procedures include reverse transcription (RT), polymerase chain reaction (PCR), RT-PCR, DNA labeling reactions, and sequencing/cycle sequencing analysis.

Concentration: In water of sodium salts: 10 mM each, pH 7.5

Quality Control

- HPLC analysis (> 98 %);
- NMR analysis (inorganic phosphates)
- Exo-endo deoxyribonucleases 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

www.bocascientific.com
(781) 686-1631
info@bocascientific.com