

**Set of 4 dNTPs (dATP, dCTP, dGTP, TTP)**

dNTPs are the building material for DNA molecule and used in various assays based on PCR. The purity of dNTPs is highly important for assay results' accuracy. 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 applications. HPLC is a suitable method of testing dNTP purity. dNTPs offered are HPLC tested and can be employed in highly sensitive assays

The set consists of 100mM aqueous solutions of dATP, dCTP, dGTP, TTP each supplied in a separate vial.

The deoxynucleotides, PCR grade 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.

All deoxynucleoside triphosphates are produced by the highly effective new chemical method developed in-house, the methods is effectively used for a couple of Years.

**Purity assays:**

- HPLC analysis (>98%);
- NMR analysis (inorganic phosphates) - passed
- Exo-endo deoxyribonucleases contamination test – passed
- UV-Spectral analysis – passed
- Spectrophotometry - passed

**Functional assays:**

- Production of 8kb PCR fragment from genomic DNA with Taq DNA polymerase – passed
- Production of 0,6kb PCR fragment from genomic DNA with Pfu DNA polymerase - passed

**dTTP Na<sub>4</sub> \* 3H<sub>2</sub>O**

MW 624,2, Thymidine 5'-triphosphate, tetrasodium salt, Purity: 98,8% (HPLC)

**dGTP Na<sub>4</sub> \* 3H<sub>2</sub>O**

MW 649,2, Deoxyguanosine 5'-triphosphate, tetrasodium salt, Purity: 98,7 % (HPLC)

**dCTP Na<sub>4</sub> \* 3H<sub>2</sub>O**

MW 609,2, Deoxycytidine 5'-triphosphate, tetrasodium salt, Purity: 98,9 % (HPLC)

**dATP Na<sub>4</sub> \* 3H<sub>2</sub>O**

MW 634,2, Deoxyadenosine 5'-triphosphate, tetrasodium salt, Purity: 98,7 % HPLC

<b><u>Cat #</u></b>	<b><u>Pack size</u></b>
110011	4 x 200 µl (100 mM)
110012	4 x 1000 µl (100 mM)
110031	4 x 200 µl (20 mM)
110031	4 x 200 µl (20 mM)

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