



**Just fine Molecular Biology**

---

**dUTP**

2'-Deoxyuridine, 5'-Triphosphate, sodium salt

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

**Description** Solution in water of sodium salts of dUTP 100mM/20mM, pH 7,5, FW 468, C<sub>9</sub>H<sub>15</sub>N<sub>2</sub>O<sub>14</sub>P<sub>3</sub> (free acid)

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.

**Purity assays:**

- HPLC analysis (>98%); Not more then 5% of dNDPs were found by HPLC
- 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

**Usage** The solution is ready for use and is optimized for PCR

**Storage** dNTPs can be stored at least 12 months at -20°C in a constant-temperature freezer. Avoid multiple freeze-thawing. For long-term usage, aliquoting is recommended.

<b>Cat.-No:</b>	<b>Pack size</b>
109001	0,2 ml (100 mM)
119094	1,0 ml (100 mM)

Version AS06.01.1

---

**Bioron GmbH**

Contact: Phone: +49-(0)-621- 5720 915 Fax:+49-(0)-621-5720 916

E-Mail: [info@bioron.net](mailto:info@bioron.net) [www.bioron.net](http://www.bioron.net)