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## Product Information

Version 4.2, Revision 2010-08-10

### Product: dNTP Solutions (dATP, dCTP, dGTP and dTTP)

**Catalog number**

A2405, A2407, A2422, A2453, A2446, A2447

**CAS Number**

N/A

**Grade**

Ultra Pure

**Storage**

-20 °C

**Product Description**

dNTP's (deoxyribonucleotide triphosphates; dATP, dCTP, dGTP and dTTP) are used in research to generate DNA second strands for PCR\* amplification, random-primed and nick-labeling, DNA sequencing and reverse transcription reactions. In most labeling reactions (including DNA sequencing reactions), a combination of three unlabeled ("cold") dNTP's are mixed with one labeled ("hot") dNTP. For this reason, it is often advantageous to prepare the four individual deoxynucleotide triphosphates as separate stock solutions.

Biomatik's dNTP solutions are provided in either 10mM or 25mM concentration in sterile, deionized water at neutral pH. dATP, dCTP, dGTP and dTTP are provided in 100mM concentration in sterile, deionized water at neutral pH. The neutral pH is important to maintain the stability of the materials in solution. Additionally, these solutions are prepared from monosodium salts of the free nucleotides, and no excess sodium ion is used in buffering. Excess sodium ions in solution can inhibit DNA amplification reactions. Our manufacturing process ensures these solutions are free of nucleases and contaminating nucleic acids, and are function tested in Klenow and thermostable polymerase reactions.

**Assay**

Absorption Maxima (pH 7.0):

dATP 259nm ± 2nm

dCTP 271nm ± 2nm

dGTP 253nm ± 2nm

dTTP 267nm ± 2nm

pH: 7.0 ± 0.5

Stability (-20 °C): 1 year

***This material is for laboratory research purpose and/or in vitro use only and is not to be used in humans or animals.***

***\* The PCR process is covered under patents owned by Hoffmann-La Roche Inc. Purchase of these solutions does not confer license to practice PCR under any patents held by Hoffmann-La Roche.***