

## M5 Ultra dNTPs (2.5 mM each)

Product Name	Unit	Cat.No.
M5 Ultra dNTPs (2.5 mM each)	0.5ml	MF042-plus-01
M5 Ultra dNTPs (2.5 mM each)	2.5ml	MF042-plus-05
M5 Ultra dNTPs (2.5 mM each)	50 ml	MF042-plus-100

### 【Storage】

-20°C

### 【Description】

dNTP Mix contains aqueous solution of dATP, dCTP, dGTP and dTTP, each at a final concentration of 2.5 mM. The Mix offers the possibility to reduce the number of pipetting steps and the risk of reaction set up errors.

### 【Applications】

For use in PCR, real-time PCR, high fidelity and long PCR, LAMP-PCR, cDNA synthesis, RT-PCR, RDA, MDA, DNA labeling, and DNA sequencing.

### 【Certificate of Analysis】

**Purity** is  $\geq 99\%$  for each dNTP, used for dNTP Mix preparation (determined by HPLC). pH is 7.3-7.5 for each dNTP, used for dNTP Mix preparation (determined according to Ph. Eur. 2.2.3).

**Endo- and exonucleases.** Each dNTP, used for dNTP Mix preparation, was tested by incubation of single stranded and double stranded radiolabeled oligonucleotides with 1 5L of 20 mM dNTP for 4 hours at 37°C and separation of reaction mixtures on a denaturing polyacrylamide gel. Phosphoimaging has not detected DNA degradation.

**Ribonucleases.** Each dNTP, used for dNTP Mix preparation, was tested by incubation of 2,000 bases RNA transcript with 1 5L of 20 mM dNTP at 37°C for 4 hours and separation of reaction products on an agarose gel. There was no decrease in RNA transcript band intensity compared to control.

**Nicking activities.** Each dNTP, used for dNTP Mix preparation, was tested by incubation of 1 5g of supercoiled pUC19 DNA with 1 5L of 20 mM dNTP at 37°C for 17 hours and separation of reaction mixtures on an agarose gel. Neither linearised plasmid, nor relaxation of supercoiled plasmid was detected as compared to control.

**E.coli DNA.** Quantitative PCR test on ABI Prism 7000 SDS, which uses amplification of E.coli 23S rRNA gene fragment did not detect E.coli DNA.

**Human DNA.** Quantitative PCR test on ABI Prism 7000 SDS, which uses amplification of human genomic DNA fragment did not detect human DNA.