

Check the product label for actual catalog number, lot and expiry date.

## dNTP Mixes - Bulk Sizes

CAT.#	SIZE	COMPONENTS	COMPONENT COMPOSITION
NUM25B-25	25 ml	25 ml - 25 mM dNTP Mix	
NUM25B-100	100 ml	100 ml - 25 mM dNTP Mix	Aqueous solution of equal concentration of 25 mM each (dATP, dCTP, dGTP, dTTP) of 4 dNTPs, sodium salts, pH 8.5 (at 4°C)
NUM25B-500	500 ml	5 x 100 ml - 25 mM dNTP Mix	
NUM25B-1000	1000 ml	10 x 100 ml - 25 mM dNTP Mix	

Storage In the dark at -20°C.

### APPLICATIONS

- All molecular biology applications including dNTPs, like:
- cDNA synthesis
  - Standard PCR, Long and high-fidelity PCR
  - qPCR
  - Sequencing

### BENEFITS

- Pure from contaminating & deaminated nucleotides
- Pure from pyrophosphates & tetraphosphates
- Free from nucleases, nickases & protease
- Free from bacterial & human DNA
- Functionally tested in demanding applications

### PRODUCT DETAILS

highQu dNTP sets and mixes meet all highest industry standards and allow for unrivaled performance of your PCR and other DNA synthesis reactions.

Produced under the stringent quality monitoring conditions, they guaranty reproducible results. More than 99% HPLC purity eliminates inhibitions of PCR and allows for increased yields with higher dNTP concentrations.

highQu dNTPs are stable during storage/usage/freezing/thawing. Exceptional stability eliminates dNTP usability concerns related to short term ambient temperature shipments, room temperature storage or PCR exceeding 40 cycles:

- ✓ Stable 36 months at -20°C & 4 weeks at +4°C
- ✓ Stable after minimum 100 freezing/thawing cycles
- ✓ Stable for ≥week at ambient temperature

### NOTES

- Highly concentrated dNTP solutions require thorough mixing every time before the use.
- To avoid concentration fluctuations and to achieve reproducible results, take care to mix every dNTP solution very well not only after thawing, but also before every new pipetting step.
- The optimal dNTP mix shall have equal concentrations of all 4 dNTPs.

IN VITRO RESEARCH USE ONLY

### RECOMMENDATIONS FOR STANDARD PCR

- Typical concentration of each dNTP in the PCR reaction is in a range of 0.2 – 0.25 mM.
- Higher concentration increases PCR yields, however Mg<sup>2+</sup> ions bind to dNTPs, therefore, both components shall be present in coordinated concentrations.
- Too high dNTPs and magnesium concentrations reduce PCR fidelity.
- Use final 3 mM MgCl<sub>2</sub> with 0.25 mM each dNTP concentration for routine PCR.

#### ORDERING

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