

# New illustra dNTPs: higher purity nucleotides

illustra™ dNTPs from GE Healthcare offer high-purity dNTPs at a competitive price for your cutting-edge research.

Incorporation of recent advances in manufacturing technology has allowed GE Healthcare to provide the highest purity deoxynucleotides (dNTPs) available for enzymatically sensitive applications like nucleic acid amplification, sequencing, labeling, mutagenesis, cDNA synthesis, and expression profiling.

illustra dNTPs are:

- Free from DNase, RNase and nicking enzyme activity.
- > 99% triphosphate pure (by HPLC) ensuring optimum performance and consistency.
- Functionally tested for Long PCR (20 kb).
- Buffer-free and ready-to-use solutions in multiple formats.
- Stable for 24 months (-20°C).
- Functionally tested for sequencing with Thermo Sequenase DNA polymerase.
- Shipped with a Certificate of Analysis.
- Available as custom formulations.

## Specifications

Test	Purpose	Current dNTPs Specifications	NEW illustra dNTP Specifications
Concentration		100 ± 3 mM	100 ± 3 mM
pH	Stability and functionality	7.5 ± 0.2	7.5 ± 0.2
Triphosphate purity	HPLC (Mono Q) Separates di and mono phosphates	> 99.0% tr phosphate	> 99.0% triphosphate
Base purity	Alkaline phosphatase digestion followed by HPLC (C18). Separates & quantitates contaminating bases	≥ 99.5% correct nucleoside	≥ 99.5% correct nucleoside
Functional Test for PCR	Long PCR. Synthesis of a 20.7-kb lambda DNA fragment	Pass	Pass
DNases	DNases interfere with DNA amplification and sequencing	Not tested	Free from DNases
RNases	RNases interfere with reverse transcription	Not tested	Free from RNases
Nicking activity	Nicking interferes with DNA amplification and sequencing	Not tested	Free from nicking activity



High-purity nucleotides are functionally tested for long PCR. Lambda DNA (1.00 ng) was amplified with two primers 20.7 kb apart. PCR was performed under standard conditions using mixes (containing three dNTPs) spiked with the fourth dNTP, indicated above each set of lanes. The volume of PCR product added is shown above each lane. The products were separated on a 0.8% agarose gel.



## Ordering Information

All of our nucleotides will be upgraded by the end of 2006.

Please refer to the table below to determine new catalog numbers when placing your next order.

Current GE dNTP Catalog Number	NEW GE illustra dNTP Catalog Number	Product	Concentration	Quantity
27-2050-01	28-4065-01	2'-Deoxyadenosine 5'-Triphosphate Solution (dATP)	100 mM	25 µmol
27-2050-02	28-4065-02	2'-Deoxyadenosine 5'-Triphosphate Solution (dATP)	100 mM	100 µmol
27-2050-03	28-4065-03	2'-Deoxyadenosine 5'-Triphosphate Solution (dATP)	100 mM	500 µmol
27-2060-01	28-4065-11	2'-Deoxycytidine 5'-Triphosphate Solution (dCTP)	100 mM	25 µmol
27-2060-02	28-4065-12	2'-Deoxycytidine 5'-Triphosphate Solution (dCTP)	100 mM	100 µmol
27-2060-03	28-4065-13	2'-Deoxycytidine 5'-Triphosphate Solution (dCTP)	100 mM	500 µmol
27-2070-01	28-4065-21	2'-Deoxyguanosine 5'-Triphosphate Solution (dGTP)	100 mM	25 µmol
27-2070-02	28-4065-22	2'-Deoxyguanosine 5'-Triphosphate Solution (dGTP)	100 mM	100 µmol
27-2070-03	28-4065-23	2'-Deoxyguanosine 5'-Triphosphate Solution (dGTP)	100 mM	500 µmol
27-2080-01	28-4065-31	2'-Deoxythymidine 5'-Triphosphate Solution (dTTP)	100 mM	25 µmol
27-2080-02	28-4065-32	2'-Deoxythymidine 5'-Triphosphate Solution (dTTP)	100 mM	100 µmol
27-2080-03	28-4065-33	2'-Deoxythymidine 5'-Triphosphate Solution (dTTP)	100 mM	500 µmol
27-2040-01	28-4065-41	2'-Deoxyuridine 5'-Triphosphate Solution (dUTP)	100 mM	25 µmol
27-2040-02	28-4065-42	2'-Deoxyuridine 5'-Triphosphate Solution (dUTP)	100 mM	100 µmol
27-2035-01	28-4065-51	dNTP Set (A,C,G,T)	100 mM	4 x 25 µmol
27-2035-02	28-4065-52	dNTP Set (A,C,G,T)	100 mM	4 x 100 µmol
27-2035-03	28-4065-53	dNTP Set (A,C,G,T)	100 mM	4 x 500 µmol
27-2037-01	28-4065-54	dNTP Set (A,C,G,U)	50 mM	4 x 25 µmol
27-2094-01	28-4065-57	DNA Polymerization Mix dNTP Set (A,C,G,T)	20 mM	10 µmol
27-2094-02	28-4065-58	DNA Polymerization Mix dNTP Set (A,C,G,T)	20 mM	40 µmol (4 x 10 µmol)
US77119-500UL	28-4065-60	PCR Nucleotide Mix dNTP Set (A,C,G,T)	25 mM	500 µl
US77170	28-4065-62	PCR Nucleotide Mix dNTP Set (A,C,G,T)	2 mM	1 ml
US77212-500UL	28-4065-64	PCR Nucleotide Mix dNTP Set (A,C,G,T)	10 mM	500 µl

## Contact Information

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