



CleanAmp™ dNTPs

The Next Generation in Hot Start PCR



TriLink
BioTechnologies

dNTPs

A New Approach to High Stringency PCR

CleanAmp™ dNTPs are the most versatile solution in TriLink's line of PCR enhancing products. CleanAmp™ dNTPs offer a universal approach to improved Hot Start PCR. Replacement of the standard dNTPs, the essential DNA polymerase substrate, with CleanAmp™ dNTPs, offers the same advantages as more costly Hot Start enzymes.

CleanAmp™ dNTPs offer precise control at the start of PCR thermal cycling by blocking DNA polymerase nucleotide incorporation until heat activation. The temperature-dependent control of DNA polymerase extension vastly reduces mis-priming, primer dimer formation and other common deleterious effects (Figure 1). This improvement in the specificity of target amplification allows for enhanced detection of low input template concentrations (Figure 2).

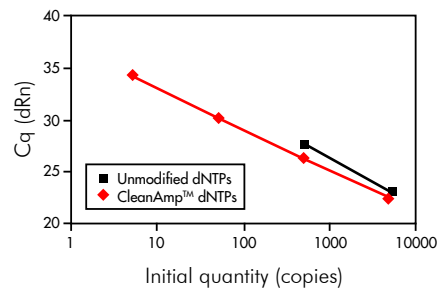


Figure 2: CleanAmp™ dNTPs improve the limit of detection in real-time PCR by two orders of magnitude.

A Flexible Solution

CleanAmp™ dNTPs are compatible with a number of thermostable DNA polymerases, allowing for great flexibility in PCR design (Figure 3). The use of CleanAmp™ dNTPs in the experiment shown in Figure 3 eliminated or reduced primer dimer formation. Moreover, each DNA polymerase was able to produce the desired amplicon, demonstrating the versatility of CleanAmp™ dNTPs.

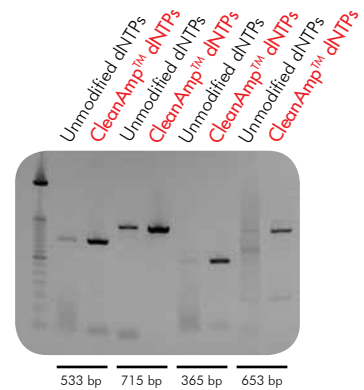


Figure 1: CleanAmp™ dNTPs improve amplification yield and specificity for a number of targets in PCR.

CleanAmp™ dNTPs:

- Offer a significant cost savings over other Hot Start technologies
- Allow easy introduction into PCR reactions
- Reduce or eliminate primer dimer formation
- Reduce or eliminate mis-priming

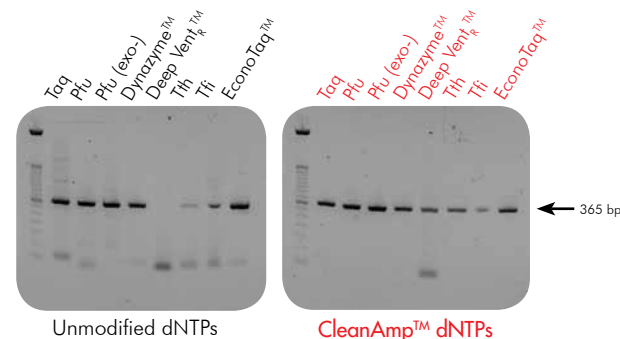


Figure 3: CleanAmp™ dNTPs are compatible with a number of commercially available DNA polymerases suited for PCR.

Improved PCR Performance

When CleanAmp™ dNTPs are used in combination with other Hot Start solutions, a greater benefit can be achieved. CleanAmp™ dNTPs have demonstrated a synergistic effect when used with Hot Start DNA polymerases, such as AmpliTaq® Gold, HotStart-IT®, Platinum® Taq, and new Hot Start technologies, such as CleanAmp™ Primers. In Figure 4 enhanced PCR specificity can be seen when CleanAmp™ dNTPs are used with AmpliTaq® Gold DNA polymerase and CleanAmp™ Precision Primers. Although each Hot Start approach improves the specificity and efficiency of PCR, a combined improvement is seen with CleanAmp™ dNTPs.

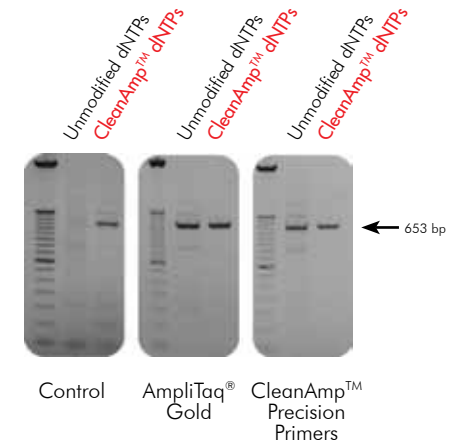


Figure 4: When used in combination with other Hot Start technologies, such as AmpliTaq® Gold DNA Polymerase or CleanAmp™ Primers, CleanAmp™ dNTPs offer a synergistic improvement to PCR performance.

Ordering

CleanAmp™ dNTPs offer excellent results in a number of PCR-based applications for a fraction of the cost of other Hot Start solutions. CleanAmp™ dNTPs can be ordered by phone, email or online. They are sold as a mix of dATP, dCTP, dGTP and dTTP at 10 mM concentration each in two convenient pack sizes.

CleanAmp™ dNTP Mix

N-9501-2	2 μmole each (4 x 2 μmoles)	\$90
N-9501-10	10 μmole each (4 x 10 μmoles)	\$350

Signature TriLink Quality

TriLink has over 12 years of experience in making modified nucleoside triphosphates. Our strong quality commitment and our extensive knowledge of triphosphate chemistry results in the best products possible. All CleanAmp™ dNTPs are analyzed by AX-HPLC, RP-HPLC, ³¹P NMR, ¹H NMR and Mass Spec and are tested in a functional assay.

Contact Us to Discuss Your Project Today!



TriLink BioTechnologies is an industry leader in manufacturing high quality oligonucleotides and nucleoside triphosphates at small and mid-scales.

TriLink operates a GMP laboratory with a QSR environment and provides:

- Milligram to multi-gram synthesis
- Highly-modified oligonucleotides and nucleosides
- Oligonucleotide radiolabeling services
- Custom chemistry
- Contract research services
- Industry-leading technical support

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