



# End-Point PCR Applications



azura  
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| Empowering  
Discovery



# ChemStart™ DNA Polymerase

ChemStart™ DNA Polymerase is a chemically modified form of Taq DNA Polymerase which requires a heat-activation step prior to PCR. Upon thermal activation, a polymerase modifier is permanently released providing for highly specific enzyme activation.

The resulting hot-start PCR delivers unparalleled sensitivity, yield and specificity compared with conventional DNA Polymerase technology. ChemStart™ DNA Polymerase is a high-performance chemically-mediated system which specifically circumvents the need for Taq monoclonal antibodies and therefore eliminates the possibility of biological contamination.

In addition, a proprietary enzyme preparation process removes bacterial DNA sequences making ChemStart™ an ideal choice for microbial screening, pathogen detection and other assays in which the reduction of false positives is essential.

## Applications

- Multiplex PCR
- Microbial screening
- Pathogen detection
- Complex genotyping
- Low-copy target PCR

## Ultra-Pure Enzyme

- Proprietary production process eliminating DNA contaminating sequences

## Room temperature assembly

- Inactive at room temperature, requires thermal activation

## Leaves A overhang

- For direct integration into TA cloning vectors

## ChemStart™ DNA Polymerase

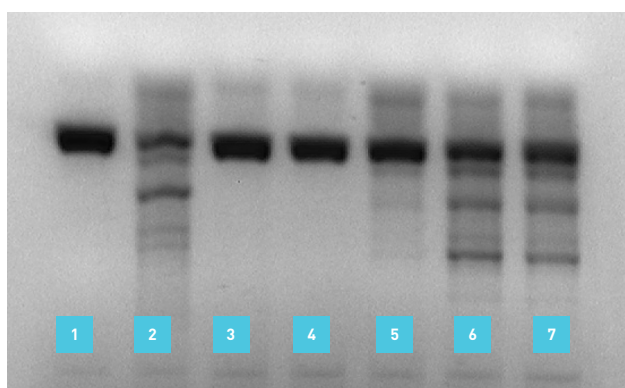


Fig 1.

- Amplification of 300 bp fragment of HIV genome and subsequent electrophoresis in 2% agarose gel.
- PCR – 30µl reaction volume containing 0.2 ng HIV genome with 2 units ChemStart™ DNA Polymerase (35 cycles).
- Lanes: 1, 3, and 4 – ChemStart™ DNA Polymerase
- Lanes: 6 and 7 – Competitor Chemical Hot-Start Polymerase (AmpliTaq® Gold)
- Lane: 2 – Antibody-mediated Hot-Start Polymerase (Platinum® Taq)

ChemStart™ DNA Polymerase exhibits excellent specificity and robust activity with complex viral targets and provides superior performance when compared with alternative polymerase preparations.

Products	Pack Size	Catalog No.	Price
ChemStart™ DNA Polymerase	500u (5u/µl)	AZ-1405	\$195
ChemStart™ DNA Polymerase	1000u (5u/µl)	AZ-1410	\$335
ChemStart™ DNA Polymerase	5000u (5u/µl)	AZ-1450	\$1,350