Biochemical Professional Company

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i-MAX™ DNA Polymerase

High Performance Polymerase Blend for LONG and ACCURATE PCR

High Sensitivity and Specificity

CAT. 25041 (250 U)
CAT. 25042 (500 U)

POWER and POWER

i-MAX™ PCR System is a versatile and easy-to-use enzyme, with powerful advantages for all PCR applications. i-MAX™ PCR System is an optimized mixture of i-Taq™ DNA polymerase and a proofreading DNA polymerase which have been shown to significantly increase PCR product yield and enhance amplification of a broader range of targets compared to single enzyme formulations.
The enhanced performance of polymerase mixtures is presumably due to the capacity of one enzyme to complement the inability of a second enzyme to extend a primer through certain obstructions. These potential obstructions include mispaired bases that cause non-proofreading polymerases to stall prematurely and disassociate from the primer-template, basic gaps that cannot be bridged by polymerases lacking terminal transferase activity and template secondary structures such as GC-rich hairpins.

- Ideal for amplification of large DNA fragments
- Proofreading function
- Amplifies DNA templates over 15Kb
- Successfully amplifies GC-rich sequences
- dNTP mix, 10x PCR buffer (Mg^{2+}), 10x PCR buffer, Mg^{2+} supplied

BEST

Kilobase (Kb)

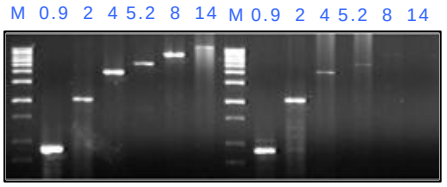


Fig. Performance comparison
The indicated DNA fragments were amplified using 2.5U i-MAX™ DNA polymerase or supplier A's long PCR DNA polymerase in 25μl reaction.

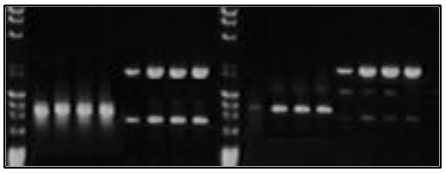


Fig. Specificity and Sensitivity
PCR was performed with i-MAX™ or supplier A's long PCR DNA polymerase in each recommended protocols.

i-StarTaq™ DNA Polymerase

Superior Performance in Hot-Start PCR

CAT. 25161 (250 U)
CAT. 25162 (500 U)

i-StarTaq™ DNA polymerase, a modified system of i-Taq™ DNA polymerase, is supplied in an inactive state that has no polymerase activity at ambient temperature. This system is a premixed complex of i-Taq™ DNA polymerase and the enhanced molecules that inhibit the DNA polymerase activities at ambient temperature.
This prevents extension of nonspecifically annealed primers and primer-dimer formed at low temperatures during PCR reaction.
This i-StarTaq™ DNA polymerase shows a stringent PCR specificity and reproducibility assay in which low-copy template targets are amplified efficiently.

- High fidelity, fast extension speed, and outstanding activity
- High accuracy and yield
- Successfully amplifies GC-rich sequences
- Eliminate mispriming and primer-dimer
- dNTP mix, 10x PCR buffer (Mg^{2+}), 10x PCR buffer, Mg^{2+} supplied

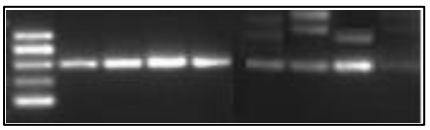


Fig. Performance comparison
A 1.3Kb fragment of the human TAP gene was amplified from various cDNAs. Amplification was performed by using i-MAX™ system or supplier A's DNA polymerase (not hot-start).

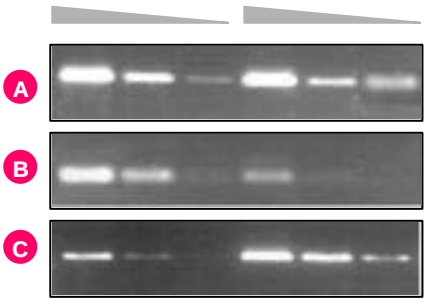
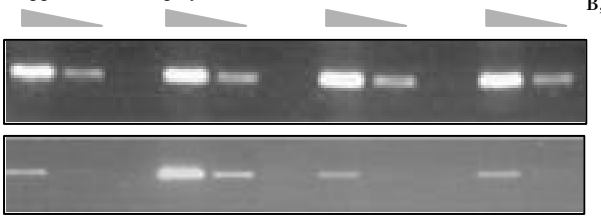


Fig. Sensitivity and specificity
PCR reaction was performed in serial diluted templates under same conditions with either hot-start DNA polymease from iNtRON (A, i-StarTaq™)), supplier B, or supplier C.



POWER HOT

i-Taq™ DNA Polymerase

CAT. 25021 (250 U) 25022 (500U)

i-Taq™ DNA polymerase is a recombinant from *Thermus aquaticus* DNA polymerase. i-Taq™ polymerase is a high fidelity thermostable polymerase that amplifies target DNA up to 5-6Kb in length with superior accuracy and yield.

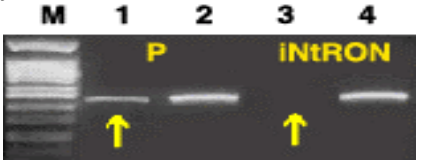


Fig. Comparison of enzyme purity
Salmonella gallinarum DNA is extracted and used as positive control. β-lactamase gene is used as primers for PCR. Lane 1,3 : No template DNA (negative control) iNtRON's i-Taq™ polymerase is **NOT** contaminated with genomic DNA.

JOURNAL DESCRIPTION

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After receiving your **REPRINTS**, we will send you a pretty **T-SHIRT**.

[ex]
PCR reaction was …… by using i-Taq™ DNA polymerase (iNtRON, INC., Korea).

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