MOBIDIAG

S7 Fusion Polymerase™

Robustness and high fidelity to amplify your most challenging targets

Biozym
SCIENCE IS OUR BUSINESS

S7 Fusion Polymerase™

S7 Fusion Polymerase™ is a **high-fidelity** DNA polymerase that offers **extraordinary performance** in PCR applications. The polymerase is fused to the processivity enhancing Sso7d domain from *Sulfolobus solfataricus*, making S7 Fusion Polymerase™ **one of the fastest and most robust** PCR polymerases on the market. S7 used with HF buffer provides best fidelity and with GC buffer best robustness with very good fidelity over a variety of conditions. The polymerase possesses a 3′-> 5′ exonuclease (proofreading) activity and it generates blunt ends in PCR.

Robustness and high fidelity

- High performance even with GC-rich templates
- Resistant to PCR inhibitors
- Extremely high fidelity
- High yields with short and long (up to 20kb) amplicons
- Works with a variety of sample materials, incl. direct blood

Applications

Ideal for high fidelity PCR needs in:

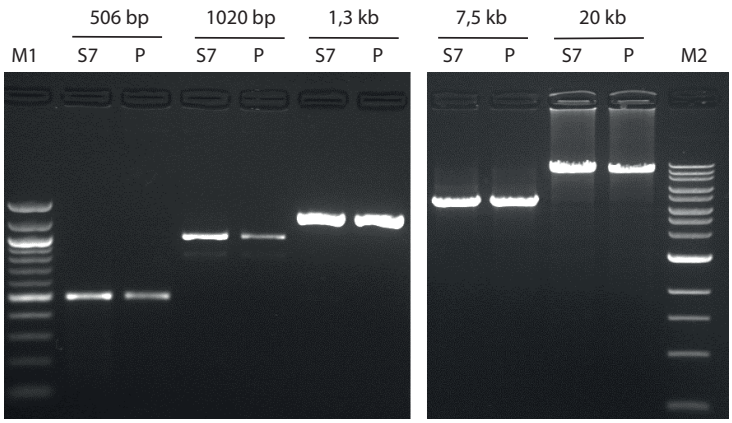
- Cloning
- Sequencing
- Other long range PCR
- Direct PCR

S7 Fusion Polymerase™

Product no.	Biozym Nr.	Package size
MD-S7-100	332530S	100 U
MD-S7-500	332530L	500 U

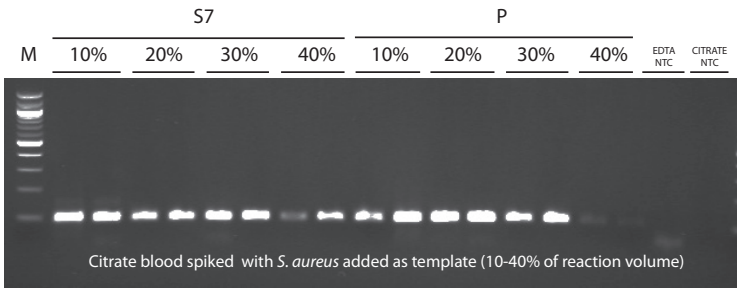
For research use only

High yields with short and long amplicons



S7: Mobidiag S7 Fusion Polymerase™
P: High-fidelity DNA polymerase fused to Sso7d from other supplier
M1: 100bp marker
M2: 1kb marker

Good tolerance even in high blood concentrations



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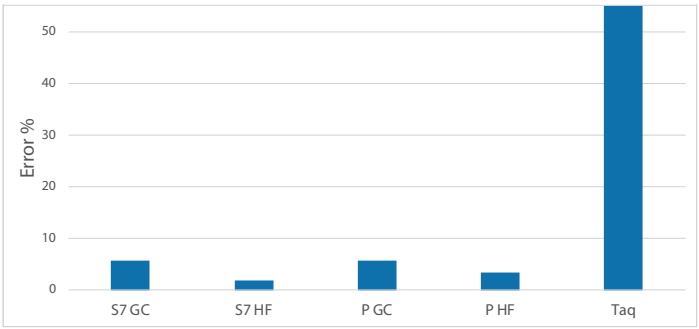
Unfiltered and undiluted citrate blood was spiked with *S. aureus* and used as PCR template (10-40% of reaction volume) for the amplification of *S. aureus* nuc gene (100 bp target). The results show good tolerance even in high (40%) blood concentrations. Similar results were achieved with EDTA blood and serum.

Extremely high fidelity



PCR fidelity of S7 Fusion was compared to another high fidelity enzyme (P) - both with their GC and HF buffers - and standard Taq polymerase by analyzing PCR products (2756 bp amplicon from lambda DNA) by PacBio sequencing. The comparison was summarized by calculating the percentage of the PCR products with an error. The high fidelity enzymes show low error rate compared to standard Taq polymerase and best performance with their HF buffers.

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