
Product Description

The Frontier Genomics SharkaTAQ™ HiFi Polymerase Master Mix is a unique blend of standard SharkaTAQ Hot Start DNA polymerase and a proof-reading polymerase with 3' to 5' exonuclease activity, supplied in a convenient 2X Master Mix format.

SharkaTAQ™ HiFi exhibits optimal activity at 75°C and a half-life of approximately 45 min at 94°C. SharkaTAQ Hot Start is inactivated using a proprietary method. The inactive state completely prevents non-specific primer annealing and the formation of primer-dimers during setup.

SharkaTAQ™ HiFi enzymes are highly purified by column-chromatography and are free of any contaminating exonuclease and endonuclease activities.

Key Features

- Use for sequencing and cloning applications or in any situation where low error rate is desirable.
- 2x Master Mix format – just add primers, template and H₂O
- Low error rate of only 4 nucleotides per 1 million nucleotide incorporation events
- Increased reproducibility and throughput, decreased risks of contamination
- Generate amplicons over 10 kb on genomic templates or 40 kb on less complex DNA
- Robust enzyme ideal for any PCR application requiring low error rate
- Fast, easy assembly at room temperature

Applications

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Specifications

Concentration: 5 Units/ uL

Unit Definition: One unit is defined as the amount of enzyme that incorporates 10 nanomoles of dNTPs into acid-insoluble form in 30 minutes at 72°C.

SharkaTAQ™ HiFi Master Mix is supplied as a convenient 2x Master Mix. This buffer contains MgCl₂ (at 1.8 mM final concentration) and detergent.

Cycling conditions:

(1) 94°C 15 minutes

(2) 94°C 30 sec

(3) 57°C 1 minute

(4) 68°C 1min/Kb for first 20
cycles and 2 min/kb for

last 15 cycles

Steps (2) – (4) are repeated 34 times