STOUT™ FAST Red Master Mix (2x)

Ordering Info

TBK0053, 80 reactions

TBK0054, 400 reactions

Description

STOUT™ FAST Red Master Mix (2x) is a convenient formulation to daily fast PCR reactions. It includes STOUT™ FAST DNA polymerase a recombinant enzyme with a fast polymerization range (4-8 kb/ min) generating consistent amplification results. The enzyme has 5´→ 3´ polymerase activity and 5´→ 3´ exonuclease activity while 3´→5´ exonuclease activity is absent. It is an extraordinary enzyme for routine PCR of genotyping or screening.

The master mix also includes a density reagent and red tracking dyes, allowing for the direct loading of PCR products onto agarose gels. The colored buffer does not interfere with PCR performance and is fully compatible with downstream applications.

Features

- Ready to use.
- Fast Amplification of PCR targets up to 5 kb.
- High Extension Rate, 2 seconds/ kb for targets < 1 kb.
- Addition without template of 3´adenine at the end of PCR fragment.
- Non-proofreading polymerase.
- Immediate Activation.

Applications

- Fast PCR.
- Generation of PCR fragments for TA cloning.
- Genotyping.
- Screening by PCR.

Kit Components

Components	TBK0053	TBK0054
STOUT™ FAST Red Master Mix (2x)	1 mL	5 x 1 mL

Storage

Store at -20°C. Shipped in blue ice.

Quality Control

Functionally tested in a 1 kb PCR amplification (GC 52%).

Material required (*not supplied*)

- PCR Tubes
- Specific Primers

Also available:

- STOUT™ FAST DNA Polymerase (TBK1011, TBK1012)
- STOUT™ FAST Hot-Start Master Mix (TBK1028, TBK1029)
- STOUT™ FAST Hot-Start Red Master Mix (TBK0039, TBK0040)
- STOUT™ Recombinant Taq DNA Polymerase Master Mix (2x) (TBK0028, TBK0029)

PROTOCOL

1. Thawing all components on ice. Vortex and centrifugate them.

2. On ice, prepare a mix of the following components, considering the number of samples plus two extra reactions.

Reaction Components	Final Concentration	Volume
STOUT™ FAST Red Master Mix 2x	1 x	12.5 µL
Forward Primer (10 pmol/ µL)	0.4 µM	1 µL
Reverse Primer (10 pmol/ µL)	0.4 µM	1 µL
PCR Grade Water		up 25 µL*
DNA template (add in step 4)		*
Final Volume		**25 µL**

** consider volume of template to be added in step 4.*

3. Distribute the mix prepared in each PCR tube or well.

4. Add in each tube the DNA sample (cDNA: < 50 ng; gDNA: < 250 ng). Mix well.

5. Set up thermocycler:

Process	Cycles	Temperature	Time
Initial denaturation	1 x	94 °C	1:00
Denaturation	25-40 x	94 °C	0:15
Annealing		Tm	0:15
Extension		72 °C	0:02 per kb (< 1 kb) 0:15 per kb (> 1 kb)
Final Extension	1 x	72 °C	3:00
Conservation	1 x	4 °C	∞