STOUT™ FAST PCR Master Mix (2x)

Ordering Info

TBK0051, 80 reactions

TBK0052, 400 reactions

Description

STOUT™ FAST PCR 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.

Kit Components

Components	TBK0051	TBK0052
STOUT™ FAST PCR Master Mix (2x)	1 mL	5 x 1 mL
PCR Grade Water	2 mL	3 x 2 mL

Order Info Kit Components: *STOUT™ FAST Master Mix (TBK0051) | PCR Grade Water, nuclease free (TBB0303).*

Storage

Store at -20°C. Shipped in blue ice.

Quality Control

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

Features

- 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.

Material required (*not supplied*)

- PCR Tubes
- Specific Primers

Applications

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

Also available:

- STOUT™ FAST DNA Polymerase (TBK1011, TBK1012)
- STOUT™ FAST RED Master Mix 2x (TBK0053, TBK0054)
- WARM™ FAST Hot-Start Red Master Mix (2x) (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 PCR 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	∞