2×*TransStart*® *FastPfu* Fly PCR SuperMix

Please read the data sheet carefully prior to use.

Cat. No. AS231

Storage: at -20°C for two years

Description

TransStart® *FastPfu* Fly PCR SuperMix is a ready-to-use mixture of *TransStart*® *FastPfu* Fly DNA polymerase, dNTPs, and optimized buffer, featuring high amplification efficiency, fast amplification speed, high fidelity and high specificity. The SuperMix is provided at 2× concentration and can be used at 1× concentration by adding template, primers and H_2O for amplification. The amplified product of 2×*TransStart*® *FastPfu* Fly PCR SuperMix is blunt-ended and can be cloned directly into pEASY®-Blunt series of vectors. It can also be directly loaded on agarose gel for electrophoresis. If it is used for cloning, it needs to be purified to remove the dye.

- Reduce PCR operation time.
- Avoid contamination caused by multi-step operation.
- *TransStart*® *FastPfu* Fly PCR SuperMix offers 108-fold fidelity as compared to *EasyTaq*® DNA Polymerase.
- Amplification of genomic DNA fragment up to 15 kb.
- Amplification of plasmid DNA fragment up to 20 kb.

Features

Fast, high fidelity, strong specificity, good stability.

Applications

- Ultra high fidelity PCR
- Site-directed mutagenesis
- Blunt end cloning
- Complex templates PCR
- GC/AT-rich templates PCR
- Long fragment amplification

Kit Contents

Component	AS231-01	AS231-02
2×*TransStart*® *FastPfu* FLy PCR SuperMix (-dye)	1 ml	5×1 ml
Nuclease-free Water	1 ml	5 ml

Reaction Component (50 µl reaction volume)

Component	Component	Final Concentration
Template	Variable	As required
Forward Primer (10 µM)	1 µl	0.2 µM
Reverse Primer (10 µM)	1 µl	0.2 µM
2×*TransStart*® *FastPfu* Fly PCR SuperMix	25 µl	1×
Nuclease-free Water	Variable	-
Total Volume	50 µl	-

Optimized Parameters (50 µl reaction volume)

Template	Input
Genomic DNA	10-500 ng
Plasmid DNA	1-30 ng
cDNA	1-2 µl cDNA from RT reaction (50-500 ng RNA for RT reaction)

PCR

Number of Cycles	Temperature	Time
1 cycle	95℃	2 min
30-35 cycles	95℃	20 sec
	Tm-5℃	20 sec
	72℃	6 kb/min
1 cycle	72℃	5 min

Notes

• Completely thaw the contents in the tube and mix well before use.

• For GC-rich templates, the recommended denaturation temperature is 98°C.