2×*TransStart*® GoldPfu PCR SuperMix

Please read the data sheet carefully prior to use.

Cat. No. AS401

Storage: at -20°C for two years

Description

This product is a ready-to-use mixture of *TransStart*® GoldPfu DNA polymerase, dNTPs, and optimized reaction buffer showing high amplification efficiency, fast amplification, ultra high fidelity and high specificity. The SuperMix is provided at 2× concentration and can be used at 1× concentration by adding template, primers and Nuclease-free Water. The amplified products with blunt ends can be directly cloned into *pEASY*®-Blunt vectors. The SuperMix without dye (-dye) cannot be directly loaded on agarose gel for electrophoresis.

Its PCR product is not suitable for polyacrylamide gel electrophoresis.

- Reduced PCR operation time.
- Avoid contamination due to multi-step operation.
- 54-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.

Highlights

Fast amplification, ultra high fidelity, high specificity, high stability.

Applications

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

Kit Contents

Component	AS401-01	AS401-02	AS401-03
2×*TransStart*® GoldPfu PCR SuperMix (-dye)	1 ml	5×1 ml	15×1 ml
Nuclease-free Water	1 ml	5 ml	3×5 ml

Recommended PCR Reaction Components and Conditions (50 µl)

Component	Volume	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*® GoldPfu PCR SuperMix (-dye)	25 µl	1×
Nuclease-free Water	Variable	-
Total volume	50 µl	-

Thermal cycling conditions

94°C	2-5 min	
94°C	20 sec	30-35 cycles
50-60°C	20 sec	
72°C	2-4 kb/min	
72°C	5-10 min	

Note

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

FOR RESEARCH USE ONLY