2×*TransFast*® *Taq* PCR SuperMix (+dye)

Please read the datasheet carefully prior to use.

Cat. No. AS102

Storage at -18℃ or below for two years

Description

This product contains *TransFast*® *Taq* DNA polymerase, dNTPs and optimized reaction buffer. Amplification speed up to 10 sec/kb suitable for fast PCR. Fragments under 2 kb can be amplified at an extremely fast speed of 1 sec/kb, greatly saving PCR reaction time. The SuperMix is provided at 2×concentration and can be used at 1×concentration by only adding template, primers and Nuclease-free Water for DNA amplification, reducing pipetting and improving the accuracy and reproducibility of experiments. This product contains dye and easy to use, the PCR products can be analyzed by electrophoresis directly.

- Reduced reaction time.
- Minimized contamination caused by multi-step operation.
- Template-independent "A" can be generated at the 3' end of the PCR product. PCR products can be directly cloned into *pEASY*®-T vectors.
- Amplification of genomic DNA fragment up to 6kb.

Features

- Rapid amplification.
- High amplification efficiency.

Applications

Rapid amplification of conventional PCR.

Kit contents

Component	AS102-01	AS102-02	AS102-03
2×*TransFast*® Taq PCR SuperMix (+dye)	1 ml	5×1 ml	15×1 ml
Nuclease-free Water	1 ml	5 ml	3×5 ml

Reaction components (50 µl reaction volume)

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×*TransFast*® Taq PCR SuperMix (+dye)	25 µl	1×
Nuclease-free Water	Variable	-
Total volume	50 µl	-

PCR reaction cycle set-up:

Temperature	Time	Number of cycles
94℃	3 min	1 cycle
94℃	5 sec	30-35 cycles
50-60℃*	15 sec	
72℃	6 kb/min**	
72℃	5 min	1 cycle

Note: * The annealing temperature needs to be adjusted according to the Tm value of the primer, which is generally set to 3~5℃ lower than the Tm value of the primer; If desired, a temperature gradient can be established to detect the optimal temperature at which the primer binds to the template.

**Extension time can be determined according to the table below:

Target	Extension Speed
0-2 kb	1 sec/kb
2-4 kb	6 sec/kb
＞4 kb	10 sec/kb

Notes

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

• Full operation on ice.

For research use only, not for clinical diagnosis.

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