

Ver.26031

h-Taq PCR Smart Mix (2X)

Cat.No.: OHT01

Description: h-Taq PCR Smart Mix (2X) is a concentrated solution consisting of h-Taq DNA polymerase, buffer, dNTPs and MgCl₂ for easy and convenient use. The product is recommended for amplification up to 5kb PCR product. The elongation velocity is 2kb/min. It has 5' to 3' polymerase activity, but lacks of 3' to 5' exonuclease activity.

Storage

- Store at -20°C.

Applications

- High throughput PCR
- High specificity PCR
- Routine PCR with high reproducibility
- Generation of PCR products for TA cloning

Recommended PCR mixture and cycling condition

PCR mixture (Reaction vol. 50μL)		Cycle		
h-Taq PCR Smart Mix (2X)	25μL	95°C	3 min	×1
Forward primer (10pmol/μL)	2μL	95°C	30 sec	} ×25-35
Reverse primer (10pmol/μL)	2μL	AT	30 sec	
Template DNA (<200ng)	-μL	72°C	1 – 10 min	
Add D.W to	50μL	72°C	10 min	×1

- Modifications on the amount of template, extension time, annealing temperature, and the number of PCR cycles can be done according to the target size, primer's T_m, and the type of templates for amplification.
- Analyze the amplification products by agarose gel electrophoresis and visualize by nucleic acid dye staining. Use appropriate molecular weight standards.

Recommended amounts of template DNA in a 50μL reaction

Human Genomic DNA	0.1 - 1μg
Plasmid DNA	0.5 – 5ng
Phage DNA	0.1 – 10ng
<i>E. coli</i> genomic DNA	10 – 100ng

Notes:

- Half-life of h-Taq DNA Polymerase is >40 minutes at 95°C
- The PCR product will give 3'-dA overhangs
- Modified nucleotides containing like biotin-, digoxigenin- or fluorescent labelled nucleotides can be used as substrate with this mix.