CYP0048- 2xTaq PCR MasterMix (with dye)

Cat#	Size
CYP0048	10*1ml

Storage: 2-8℃

Attention:

•This product contains phenol red, which may change color from orange to purple. **Color change does not affect product quality or use.**

Product Description:

•This product contains Taq DNA polymerase, dNTPs, $MgCl_2$, and reaction buffer at a concentration of 2×. It has the advantages of being fast, easy, sensitive, specific, stable, and can minimize human errors. Only DNA template and primers are needed for use.

•This product is convenient and easy to use, and can avoid contamination during PCR operation. It only needs to add an appropriate amount of 2×Taq PCR MasterMix solution, add the template and primers, and add deionized water to make the MasterMix solution concentration 1× for the reaction. Please ensure that it is fully dissolved and mixed before use, and the operation should be carried out on ice.

Product Contents:

•Taq DNA polymerase (recombinant): 0.1 units/μl; $MgCl_2$: 4 mM; dNTPs (dATP, dCTP, dGTP, dTTP): 0.4 mM

Quality Control:

•No exogenous nuclease activity was detected; it can effectively amplify single-copy genes in the human gene; no significant activity change was observed after one week of storage at room temperature.

Scope of Application:

•Gene detection: This product has small differences between batches, especially suitable for large-scale gene detection, semi-quantitative PCR experiments, and the detection of trace DNA.

•Amplification of DNA and some complex templates with special structures and high GC content (>60%) and secondary structures: amplification of DNA fragments, DNA labeling, primer extension, and sequence determination. PCR products are A-tailed and can be directly cloned into T/A vectors after purification.

Reaction Examples: (Note: The following examples are only for reference. Actual reaction conditions may vary depending on the structure of the template, primers, etc. Adjust the reaction conditions accordingly.)

•Use 2×Taq PCR MasterMix product to amplify a 1 kb fragment as a template with human genome DNA, and the reaction system is 25 μl. (If the reaction system is different, it can be increased or decreased in proportion.)

Template	10 pg-1 μg
Primer 1	0.1-1 μl
Primer 2	0.1-1 μl
2×MasterMix	12.5 μl
ddH_2O	make up to 25 μl

•PCR reaction cycle setting:

94℃: 3 min
94℃: 30 sec
55℃: 30 sec
72℃: 1-2 kb/min
} 30 cycles
72℃: 5 min

•Result detection: After the reaction is finished, take 5 μl of the reaction product for agarose gel electrophoresis. If the product is amplified with a dye mix, it can be directly loaded onto the gel without adding sample buffer.

This product is furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.