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Multipurpose SNP Genotyping qPCR MIX

Cat. No. : CW3315S (1 mL)
Storage Condition: -20 °C. Avoid repeated freeze-thaw. For frequently use, store at 2-8 °C.

Components

Component	CW3315S 1 mL
2× Multipurpose SNP Genotyping qPCR MIX	1 mL
ddH_2O	1 mL

Introduction

Multipurpose SNP Genotyping qPCR MIX is a 2 × premixed reagent designed for real-time PCR of probe-based SNP genotyping, including Taq DNA Polymerase, PCR Buffer, dNTPs, Mg^{2+}, enhancers and stabilizers. It is simple and convenient to operate. The unique PCR buffer system has strong tolerance to complex templates such as blood and saliva, which can not only efficiently amplify the extracted DNA, but also support the direct amplification of oral swab fluid and blood with a final concentration of no more than 15%. The samples do not require complicated extraction and storage processes. The results are rapid and accurate.

Notes

1. Please mix gently upside down before use and avoid foaming. It should be used after a short centrifugation.
2. Avoid repeated freeze-thaw of this product, because it may degrade the performance. This product can be stored at -20 °C in the dark for long-term storage. If frequent use is required in the short term, it can be stored at 2-8 °C.

Protocol

1. PCR reaction system

Reagent	25 μL System	Final Concentration
2× Multipurpose SNP Genotyping qPCR MIX	12.5 μL	1×
Primer Mix，10 μM each	1 μL	0.2 μM
Template DNA	Appropriate amount	
ddH_2O	to 25 μL	

2. Take different genotypic standard products as templates to optimize the annealing temperature respectively, so as to achieve better genotyping effect.
3. The blood template can be directly diluted to different concentrations by ddH_2O for amplification, and it is recommended to use the final concentration of 2% blood as the template for genotyping and amplification. The oral swab template can be gently scraped on the inner wall of the mouth about 6 times and placed in 400 μL -1000 μL ddH_2O after shaking and mixing, and then directly used as a template.
4. PCR reaction program:
   This product can use two-step PCR reaction procedure.

Procedure	Temperature	Time	
Pre-denaturation	95 °C	30 s	
Denaturation	95 °C	10 s	} 45 cycles
Annealing/Extension	60 °C (depending on the primers).	30 s signal collection	

Note:1) It is recommended to use two-step PCR reaction procedure. If good experimental results are not obtained due to the use of primers with low Tm values, three-step PCR amplification can be attempted.
2) Both real-time signal curve method and final signal endpoint method can be used for genotyping.