Product Manual

Product Name	2×Multiplex ARMS qPCR Mix
Catalog Number	CSB-DKT075
Physical Form	Liquid
Storage Conditions	-20 ±5°C, avoid repeated freeze-thaw cycles; can be stored at 2~8°C in the dark for frequent use.
Shipping Condition	≤0°C; dry ice transportation
Product Composition	Buffer system, dNTPs, ARMS Taq DNA Polymerase
Quality Control	All components have been tested and found to be free of nucleases, endonucleases, and RNase residues
Shelf Life	12 months

Product Description

2× Multiplex ARMS qPCR Mix is a reagent kit developed based on the principle of amplification blocking. It has strong blocking ability and can effectively perform gene typing mediated by ARMS-PCR. The buffer and Taq enzyme are specifically optimized and contain the necessary ions and dNTPs for amplification, eliminating the need for additional additives. This system can detect various gene mutations, detecting mutant alleles as low as 0.05% in genomic DNA and 0.01% in plasmid DNA.

Product Components

Component No.	Component Name	Specification (50T)	Specification (100T)	Specification (500T)
1	2×Multiplex ARMS qPCR Mix	0.5mL	1mL	5mL

Operating Instructions

Recommended Reaction System

Components	Additions
ddH2O	Up to 30 μL
2×Multiplex ARMS qPCR Mix	15 μL
Upstream Primer(10μM)	1μL
Downstream Primer(10μM)	1μL
Fluorescence Probe(10μM)	0.3μL
TemplateDNA	X μL

[Note]:

a. Primer Concentration: Generally, a primer final concentration of 0.2 μM in the reaction system yields good results. If the reaction performance is poor, the primer concentration can be adjusted within the range of 0.1 μM to 1.0 μM.

b. Template Concentration: Genomic DNA from animals and plants: 0.1-1 μg; Escherichia coli genomic DNA: 10-100 ng; λDNA: 0.1-10 ng; Plasmid DNA: 0.1-10 ng. If the template is undiluted cDNA, the volume used should not exceed 1/10 of the total qPCR reaction volume.

Recommended PCR Reaction Program

Temperature	Time	Cycles
95°C	3 min	1
95°C	10 sec	40-45
48-68°C	30 sec*	

[Note]:

c. Annealing Temperature and Time: The annealing temperature should be adjusted based on the primer's Tm value, generally set to 3-5°C below the primer's Tm value.

* Collect fluorescence.