

# Human K-ras Gene Mutation Detection Kit

(PCR-Melting Curve Method)

K-ras gene, located on chromosome 12p12.1, is one of the important oncogenes. Studies have shown that K-ras gene mutations exist in non-small cell lung cancer and colorectal cancer, and mutation of K-ras occurring at codon 12 and 13 which could cause KRAS protein to mutate and remain activated can render the drug ineffective.

The kit uses genomic DNA extracted from tumor paraffin-embedded tissue sections of human non-small cell lung cancer and colorectal cancer as test samples for the qualitative detection of 12 somatic mutations at codon 12 and 13 of K-ras gene.

This product is suitable for patients with non-small cell lung cancer and colorectal cancer before entering the individualized targeted therapy course and provides auxiliary diagnostic evidence for the individualized medication of clinical tumor-targeted drugs.

## Features

### Wide Coverage

Reliable detection of Human K-ras gene Mutation, covering 12 somatic mutations at codon 12 and 13 of K-ras gene in a single run

### High Sensitivity

Sensitive to detect up to 1% mutation in K-ras gene

### Internal Control

The use of internal control system in the kit can effectively prevent false negative results

### High Precision

The T<sub>m</sub> coefficient of variation was no more than 8% or T<sub>m</sub> value difference ≤1°C

### More Accessible

CE marked, accessible for more countries

### User-friendly

Validated on the most common qPCR machines with FAM fluorescence channel

The mutation of K-ras codon 12	The mutation of K-ras codon 13
Gly12Ser	Gly13Ser
Gly12Arg	Gly13Arg
Gly12Cys	Gly13Cys
Gly12Asp	Gly13Asp
Gly12Ala	Gly13Ala
Gly12Val	Gly13Val

## Data Interpretation

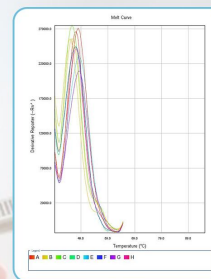


Figure 1: 12 somatic mutations at codon 12 and 13 of K-ras gene melt curve

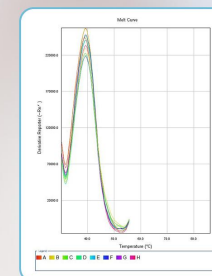


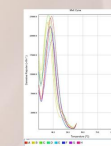
Figure 2: Internal precision reference samples melt curve

## Ordering Information

Product Name	Human K-ras Gene Mutation Detection Kit (PCR-Melting Curve Method)
Cat.No	P112H
Specification	20T/Kit
Specimen	Tumor paraffin-embedded tissue sections of human non-small cell lung cancer and colorectal cancer
Target Gene	12 somatic mutations at codon 12 and 13 of K-ras gene
Storage & Validity	-25°C~-15°C for 6 months
Applicable Equipment	Instruments with FAM fluorescence channels such as ABI7500 real time PCR system, Linegene FQD-96A real time PCR system, Tianlong Gentier Real-time PCR Systems

## Assay workflow

- 1 Sample Collection
- 2 Nucleic Acid Extraction
- 3 PCR Detection
- 4 Analysis and Report



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