

## Human MTHFR (C677T) Gene Polymorphism Detection Kit (PCR Melting Curve Method)

The MTHFR gene encodes methylene tetrahydrofolate dehydrogenase, a rate-limiting enzyme that regulates the metabolism of folate and methionine. It plays an important role in folate metabolism, DNA methylation, and DNA synthesis. The most common polymorphism of the MTHFR gene is C677T, which locates in the catalytic domain of MTHFR, and its polymorphism leads to decreased enzyme activity and thermolability.

This product is for in vitro qualitative detection of methylenetetrahydrofolate reductase (MTHFR) gene 677 genotype in DNA extracted from human peripheral blood. Therefore, the test results of this kit provide an auxiliary diagnosis for high-risk groups with low activity of methylenetetrahydrofolate reductase.

|           |                          |   |
|-----------|--------------------------|---|
| Technique | PCR-Melting Curve Method |   |
| Coverage  | MTHFR (C677T)            | ✓ |



Indication of birth defects



Risk warning of cardiovascular and cerebrovascular diseases



Personalized folate supplements

## FEATURES



### Reliable Detection

Reliable detection of methylenetetrahydrofolate reductase (MTHFR) gene 677 genotype, the most common polymorphism of the MTHFR gene



### Easy Workflow

Operating process is more easy based on PCR melting curve method. Diverse Genotyping test results can be interpreted at one time.



### High Sensitivity

Sensitive to detect as low as 2ng/μL human genomic DNA



### High Precision

The T<sub>m</sub> value range was ≤1.5°C



### User-friendly

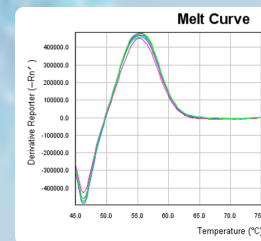
Validated on melting curve analysis systems with FAM and ROX fluorescence channels



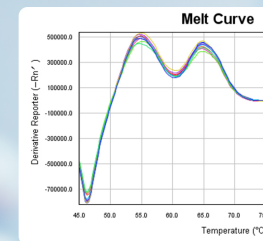
### More Accessible

CE marked, accessible for more countries

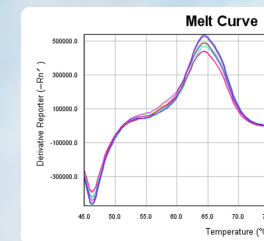
## GENE POLYMORPHISM



Mutant Homozygous (TT)



Heterozygous (CT)



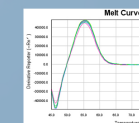
Wild Homozygous (CC)

## ORDERING INFORMATION

|                      |  |         |
|----------------------|--|---------|
| Product Name         | Human MTHFR (C677T) Gene Polymorphism Detection Kit (PCR Melting Curve Method) |         |
| Cat.No               | P130H  | P152H   |
| Specification        | 24T/Kit  | 48T/Kit |
| Specimen             | EDTA anticoagulated whole blood  |         |
| Target Gene          | MTHFR (C677T)  |         |
| Storage & Validity   | -25°C~-15°C for 12 months  |         |
| Applicable Equipment | Instruments with FAM and ROX fluorescence channels                             |         |

## ASSAY WORKFLOW

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



Version 4.0

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