

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 up to 2ng/μL human genomic DNA



High Precision

The T_m value range was ≤1.5°C



User-friendly

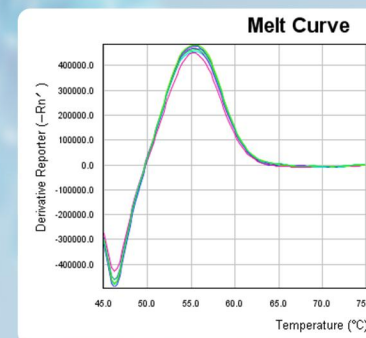
Validated on melting curve analysis systems with FAM and ROX fluorescence channels



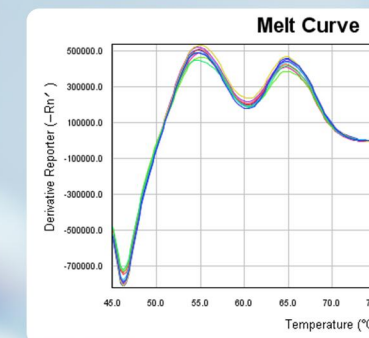
More Accessible

CE marked, accessible for more countries

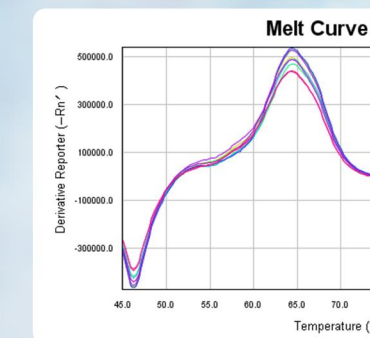
GENE POLYMORPHISM



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 6 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

