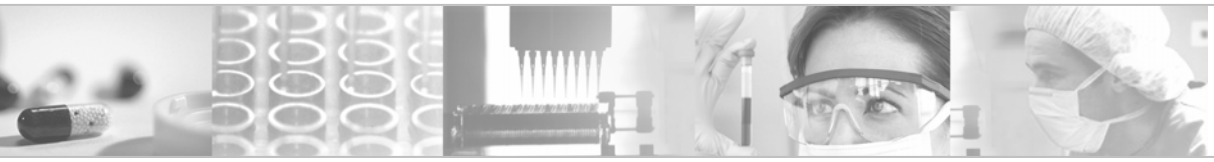


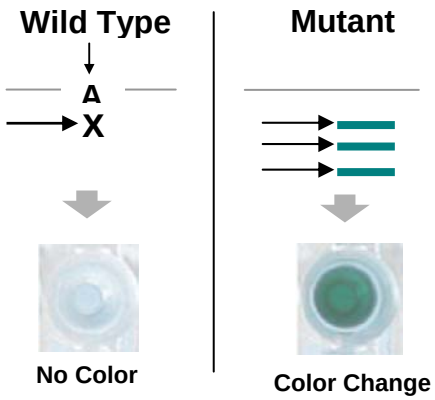
TrimGen
GENETIC DIAGNOSTICS

Colorimetric *Mutector*™

KRAS Mutation Detection Kit

The Mutector™ KRAS kit is a highly sensitive colorimetric mutation detection test, designed to accurately identify KRAS mutations in codons 12 and 13.

Codon 12	Codon 13
Gly12Ser (GGT>AGT) Gly12Arg (GGT>CGT) Gly12Cys (GGT>TGT) Gly12Asp (GGT>GAT) Gly12Ala (GGT>GCT) Gly12Val (GGT>GTT)	Gly13Arg (GGC>CGC) Gly13Cys (GGC>TGC) Gly13Asp (GGC>GAC) Gly13Ala (GGC>GCC) Gly13Val (GGC>GTC)



0% 1% 5% 10% 20% 50% 100%

Percent of Mutation

Accurately identify 11 KRAS mutations in codons 12 and 13

The Mutector™ KRAS assay detects and differentiates 11 KRAS mutations in codons 12 and 13. It is the most comprehensive mutation analysis kit available, providing clear and conclusive results.

Principle of Mutation Detection

Mutector™ assay uses proprietary STA technology* to enrich the mutation signal up to 20 times and the mutation signal is detected by a colorimetric method similar to ELISA. When the sample is wild type, the STA reaction terminates and no color will be observed. When the sample contains a mutation, the STA reaction will extend the detection primer with multiple labeled nucleotides and this extension will be **repeated 20 times to enrich the mutation signal**. A strong color will be observed.

Enrich the mutation signal 20 times to detect low-level mutations

Studies using a combination of wild type and mutant DNA show that the enrichment process enhances sensitivity, enabling the assay to detect mutations as low as 1%.

* Shifted Termination Assay (STA) technology is proprietary technology performed by using specially designed primers, modified enzyme mixture and chemistry. The STA reaction recognizes wild or mutant target sequences and selectively extends detection primers with 1 to 20 nucleotides to generate various lengths of primer extension products. The extended STA products are analyzed by color on an ELISA plate reader. The STA technology detects mutations in multiple genes as well as different types of mutations (point mutations, deletions and insertions) in the same sample.

KRAS MUTATION DETECTION

TEST OVERVIEW

Paraffin sample (FFPE), Blood sample
Fine needle aspiration sample (FNA)

Step 1 Amplification of target DNA

Step 2 Mutation Enrichment

Step 3 Mutation Detection

KIT CONTENTS

The kit contains reagents to perform 12 assays.

The reagents include

- KRAS mutation controls
- Master mix for amplification
- PCR primers
- ST reagents for mutation enrichment
- Reagents for colorimetric detection
- Pre-Coated KRAS strips

EQUIPMENT REQUIRED

- Thermal Cycler
- ELISA Reader (405nm filter)

KRAS STRIP LAYOUT

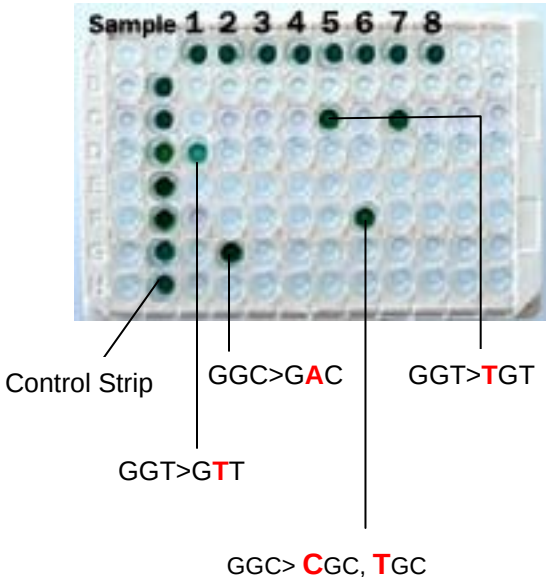
KRAS Kit A (Cat. # MH1008-M12)

Well A	GGT/GGC (Wild type control)	Codon 12
Well B	GGT>**A**GT, **C**GT	
Well C	GGT>**T**GT	
Well D	GGT>G**T**T	
Well E	GGT>G**A**T, G**C**T	
Well F	GGC> **C**GC, **T**GC	Codon 13
Well G	GGC>G**A**C	
Well H	GGC>G**C**C, G**T**C	

KRAS Kit B (Cat. # MH1008-M12B)

Well A	GGT/**A**GT	Codon 12
Well B	GGT>**C**GT	
Well C	GGT>G**A**T	
Well D	GGT>G**C**T	
Well E	GGC>**T**GC	Codon 13
Well F	GGC>**C**GC	
Well G	GGC> G**T**C	
Well H	GGC>G**C**C	

TEST RESULTS



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Not for use in diagnostic procedures.

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