

Ultra-Sensitive Mutation Detection Kits



Novel and Proprietary Mutation Enrichment Technology

Medaysis' Ultra-Sensitive Mutation Detection Kits provide Clonal Differential Amplifier (CloDiA™) PCR using novel and proprietary primers to amplify somatic Mutations and suppress or block the amplification of wild type gene in human genomic DNA.

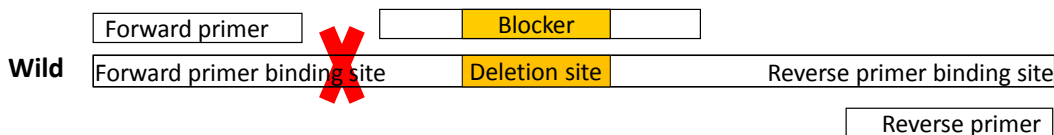
CloDiA™ PCR includes two types of technique - Unindel™ PCR and Stuntmer™ PCR. Unindel™ PCR is designed to detect a broad range of insertions/deletions (universal insertions/deletions) in the target region. The three-primer set comprising forward primer, reverse primer and blocker inhibits amplification of wild type gene but enables amplification of exonic insertions/ deletions.

Stuntmer™ PCR is designed to detect a broad range of point Mutations in the target region. Dual port primer of R Port and E Port is designed for self-competition to preferably amplify mutated gene but suppress wild type gene amplification.

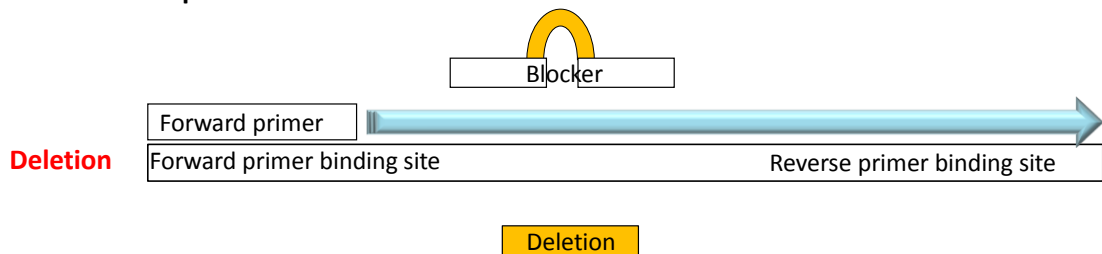
This sensitive and specific method enables the detection of less than 1% (as little as 20 ng to 100 ng) of mutant genes mixed with the wild type. Besides known Mutations, this method can detect unknown Mutations in the target region.

Unindel PCR: Detects a Broad Range of Insertions/Deletions

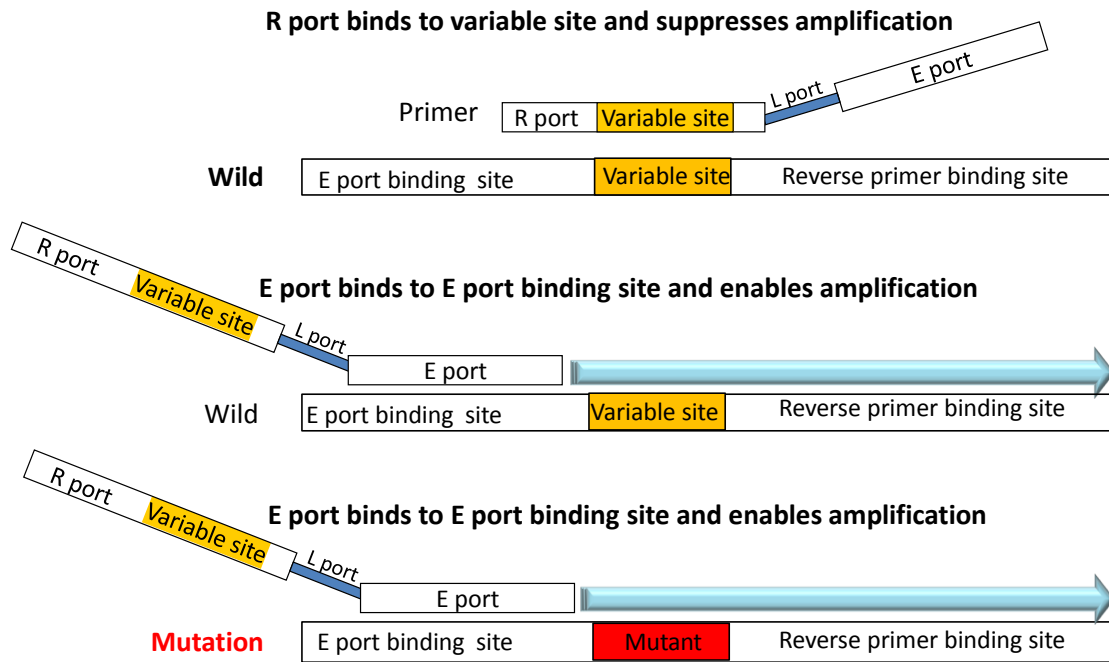
Blocker binds to deletion site and inhibits amplification



Blocker unbinds from the site and Forward primer binds to the site to enable amplification



Stuntmer PCR: Detects a Broad Range of Point Mutations



Features and Benefits

Minimal Sample

Small amount of DNA required (20 to 100 ng)

Ultrasensitive

Detect 0.1-1% mutant genes

Compatible Samples

FFPE tissues; Fine needle biopsies; Pleural effusion specimens

Highly Specific

No risk of mispriming; reagents do not encode for the Mutation of interest

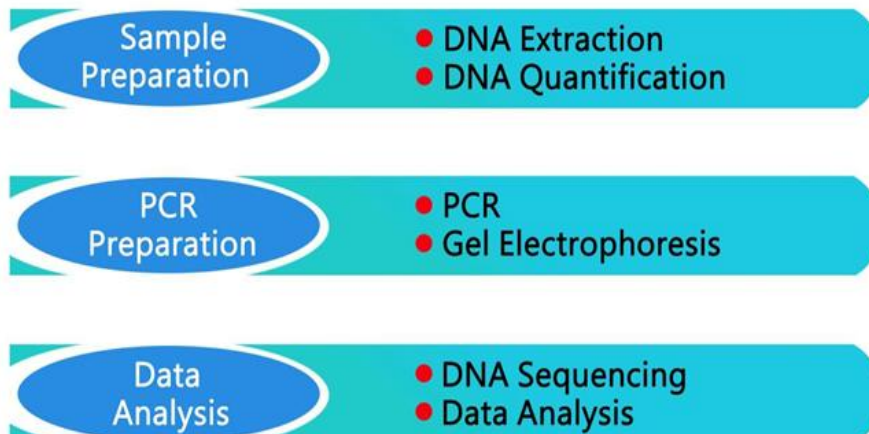
Broad range of Mutations

Hotspot Mutation analysis of target gene

Open System

Compatible with various PCR instruments

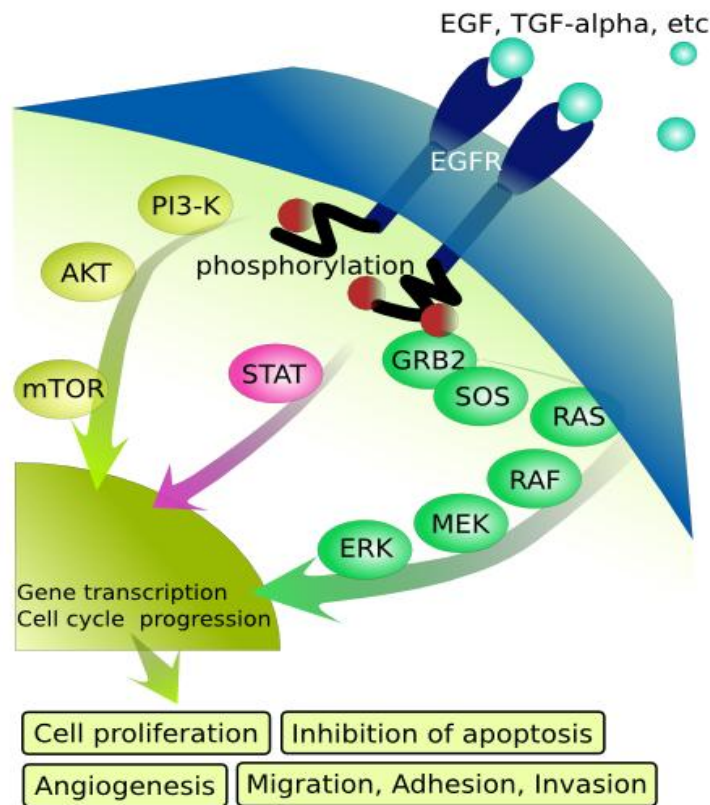
Mutation Detection Kit Workflow



Featured Product: Ultra-Sensitive EGFR and cfDNA EGFR Mutation Detection Kit_exon18/19/20/21

Cat No	Description	Tests
EGFR0001-20	Ultra-Sensitive EGFR Mutation Detection Kit_exon18/19/20/21	20
EGFR0001-50	Ultra-Sensitive EGFR Mutation Detection Kit_exon18/19/20/21	50
EGFR0002-20	Ultra-Sensitive cfDNA EGFR Mutation Detection Kit_exon18/19/20/21	20
EGFR0002-50	Ultra-Sensitive cfDNA EGFR Mutation Detection Kit_exon18/19/20/21	50

EGFR Signaling Pathway



https://en.wikipedia.org/wiki/TGF_alpha

Comparison of EGFR Mutation Detection Kits

Brand	Medaysis	R brand	Q brand	P brand	A brand
Technology	CloDiA™-PCR	AS-PCR	ARMS	PNA	ADx-ARMS
Analysis	Sanger seq.	TaqMan probe	Scorpion	SYBR Green	FAM, HEX/VIC
Target exons	18, 19, 20, 21	19, 20, 21	18, 19, 20, 21	18, 19, 20, 21	18, 19, 20, 21
	5 primer sets	41 probe	29 probe	41 probe	29 probe
	5 rxn	7 rxn	7 rxn	7 rxn	8 rxn
DNA	20-100ng	50ng	20ng	20-50ng	2-15ng
Sensitivity	0.1-1%	5%	1%	1%	1%
System	Open	Close	Close	Open	Open
	PCR	Real-time PCR	Real-time PCR	Real-time PCR	Real-time PCR

Medaysis' Mutation Detection Kits Portfolio (research use only)

Cat No	Description	Tests
ABL0001-20	Ultra-Sensitive ABL Mutation Detection Kit_M244,Q252,Y253,E255	20
ABL0001-50	Ultra-Sensitive ABL Mutation Detection Kit_M244,Q252,Y253,E255	50
AKT30001-20	Ultra-Sensitive AKT3 Mutation Detection Kit	20
AKT30001-50	Ultra-Sensitive AKT3 Mutation Detection Kit	50
ASXL10001-20	Ultra-Sensitive ASXL1 Mutation Detection Kit	20
ASXL10001-50	Ultra-Sensitive ASXL1 Mutation Detection Kit	50
BRAF0001-20	Ultra-Sensitive BRAF Mutation Detection Kit	20
BRAF0001-50	Ultra-Sensitive BRAF Mutation Detection Kit	50
DNMT3A0001-20	Ultra-Sensitive DNMT3A Mutation Detection Kit	20
DNMT3A0001-50	Ultra-Sensitive DNMT3A Mutation Detection Kit	50
EGFR0001-20	Ultra-Sensitive EGFR Mutation Detection Kit_exon18/19/20/21	20
EGFR0001-50	Ultra-Sensitive EGFR Mutation Detection Kit_exon18/19/20/21	50
EGFR0002-20	Ultra-Sensitive cfDNA EGFR Mutation Detection Kit_exon18/19/20/21	20
EGFR0002-50	Ultra-Sensitive cfDNA EGFR Mutation Detection Kit_exon18/19/20/21	50
FLT30001-20	Ultra-Sensitive FLT3 Mutation Detection Kit	20
FLT30001-50	Ultra-Sensitive FLT3 Mutation Detection Kit	50
HRAS0001-20	Ultra-Sensitive HRAS Mutation Detection Kit_12,13,59,61,117,146	20
HRAS0001-50	Ultra-Sensitive HRAS Mutation Detection Kit_12,13,59,61,117,147	50
JAK20001-20	Ultra-Sensitive JAK2 Mutation Detection Kit_V617	20
JAK20001-50	Ultra-Sensitive JAK2 Mutation Detection Kit_V617	50
KIT0001-20	Ultra-Sensitive KIT Mutation Detection Kit_V560,L576,K642	20
KIT0001-50	Ultra-Sensitive KIT Mutation Detection Kit_V560,L576,K642	50
KRAS0001-20	Ultra-Sensitive KRAS Mutation Detection Kit_12,13,59,61,117,146	20
KRAS0001-50	Ultra-Sensitive KRAS Mutation Detection Kit_12,13,59,61,117,146	50
NRAS0001-20	Ultra-Sensitive NRAS Mutation Detection Kit_12,13,59,61,117,146	20
NRAS0001-50	Ultra-Sensitive NRAS Mutation Detection Kit_12,13,59,61,117,146	50
PI3KCA0001-20	Ultra-Sensitive PI3KCA Mutation Detection Kit	20
PI3KCA0001-50	Ultra-Sensitive PI3KCA Mutation Detection Kit	50
PTEN0001-20	Ultra-Sensitive PTEN Mutation Detection Kit_R233	20
PTEN0001-50	Ultra-Sensitive PTEN Mutation Detection Kit_R233	50
SF3B10001-20	Ultra-Sensitive SF3B1 Mutation Detection Kit	20
SF3B10001-50	Ultra-Sensitive SF3B1 Mutation Detection Kit	50
TET20001-20	Ultra-Sensitive TET2 Mutation Detection Kit_R550Q	20
TET20001-50	Ultra-Sensitive TET2 Mutation Detection Kit_R550Q	50
TP530001-20	Ultra-Sensitive TP53 Mutation Detection Kit_R273	20
TP530001-50	Ultra-Sensitive TP53 Mutation Detection Kit_R273	50