

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.

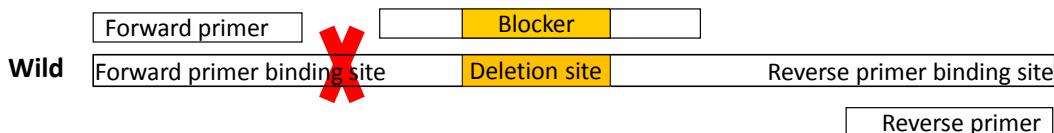
CloDiA™ PCR includes two types of technique - Unindel™ PCR and Stuntmer™ PCR. Unindel™ PCR is designed to detect a broad range of insertions/deletions (universal insertions/deletions) in the target region. The three-primer set comprising forward primer, reverse primer and blocker inhibits amplification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

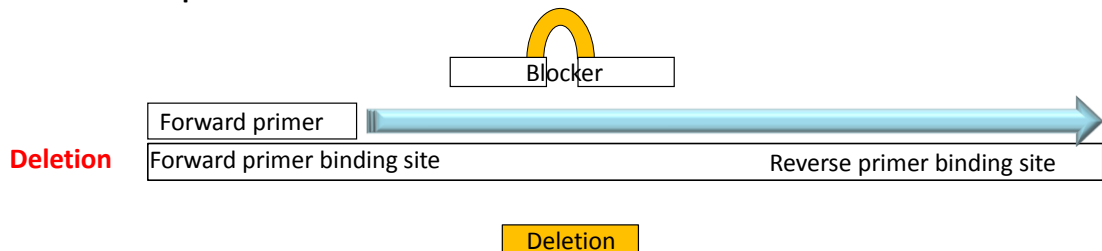
This sensitive and specific method enables the detection of less than 1% (as little as 20 ng to 100 ng) of mutant genes mixed with the wild type. Besides known Mutations, this method can detect unknown Mutations in the target region.

Unindel PCR: Detects a Broad Range of Insertions/Deletions

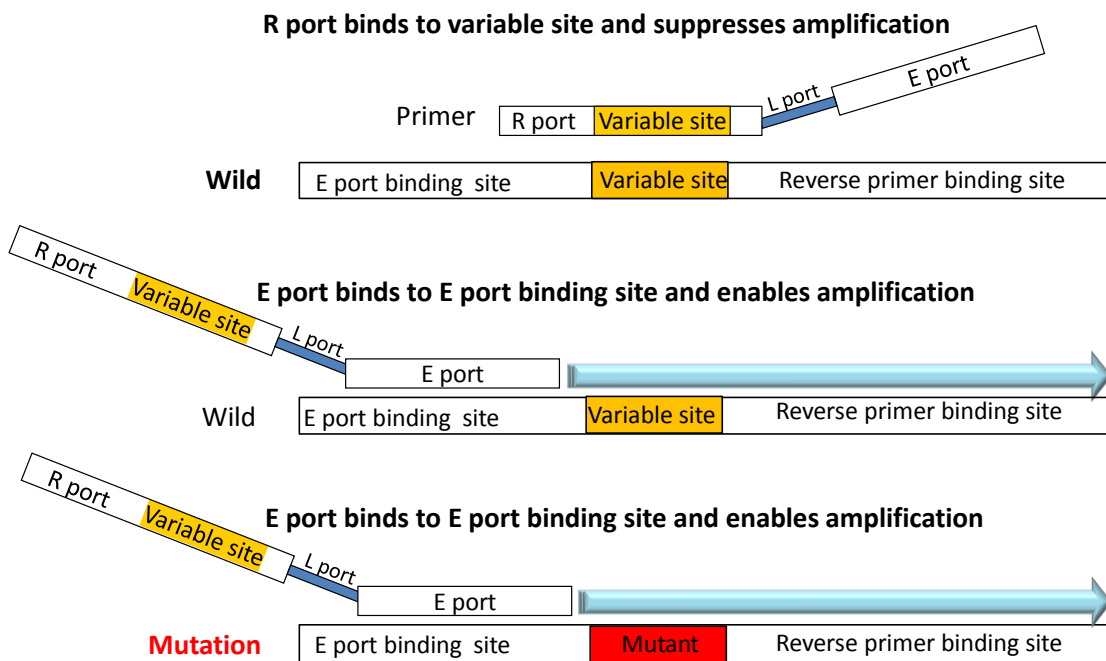
Blocker binds to deletion site and inhibits amplification



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)

Compatible Samples

FFPE tissues; Fine needle biopsies; Pleural effusion specimens

Broad range of Mutations

Hotspot Mutation analysis of target gene

Ultrasensitive

Detect 0.1-1% mutant genes

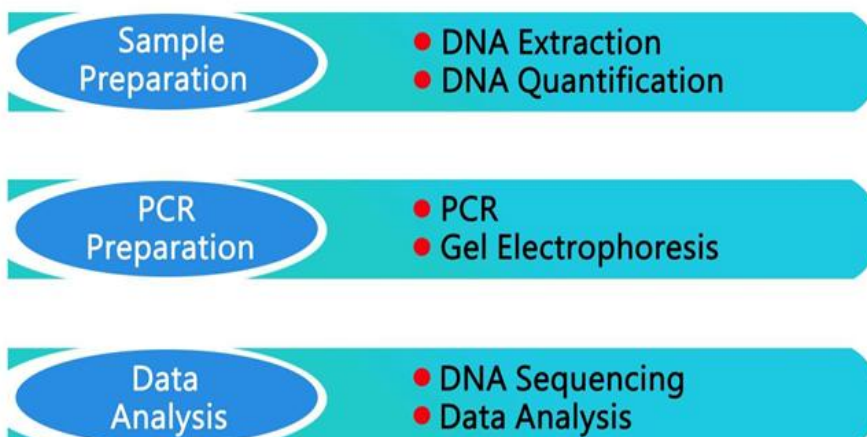
Highly Specific

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

Open System

Compatible with various PCR instruments

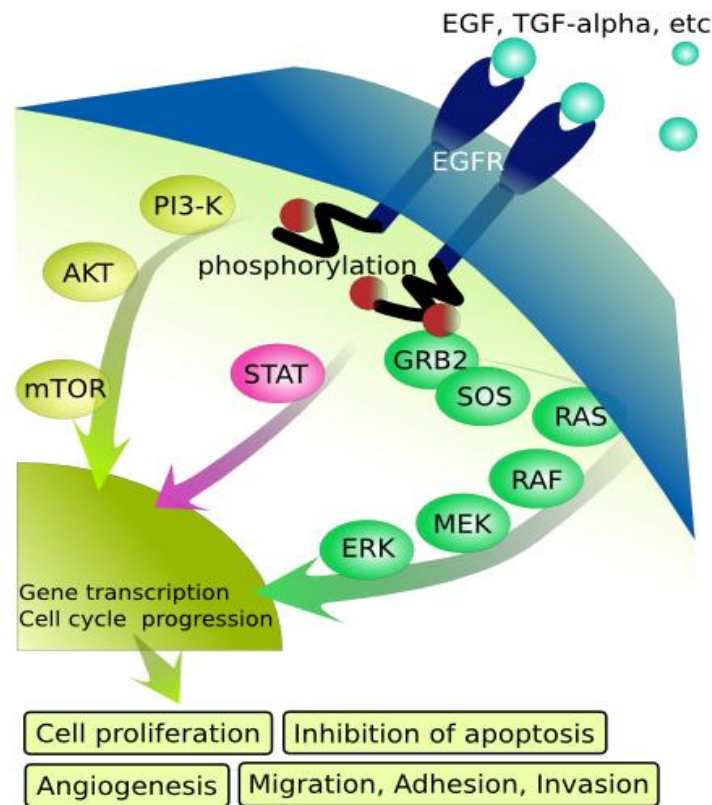
Mutation Detection Kit Workflow



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
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