

Human 172-Gene

Mutation Detection Kit

RUO

This kit is designed for the qualitative identification of key genomic mutations and guideline-recommended genomic variations in tissue biopsy sample (Formalin-Fixed Paraffin-Embedding/FFPE) and liquid biopsy sample (plasma cell-free DNA (cfDNA), cerebrospinal fluid cfDNA, and pleural effusion cfDNA). Along with the Next Generation Sequencing (NGS) technology, Human 172-Gene also uses targeted high throughput hybridization-based capture technology for detection of variants in 172 genes.

Product Advantages

01

Cover the latest and most comprehensive biomarkers

Covering 172 genes from biomarkers reported in published database and guideline-recommended biomarkers and massive international studies, including bMSI

02

Highly accurate variant detection

>30,000 × sequencing depth, UMI-based error correction and precisely measuring locus specific noise level.
GENETRON BayVarC algorithm has lower false positive rate.

03

Broad sample type for multiple testing

Enable multiple testing on the same subject. Detecting genomic variations in extracted DNA from FFPE samples, plasma cell-free DNA (cfDNA) samples, cerebrospinal fluid cfDNA samples, and pleural effusion cfDNA from samples associated with solid tumor research using NGS-based liquid biopsy.

Workflow

Sample preparation



Cell-free DNA extracted from liquid biopsy samples
Tumor DNA extracted from FFPE samples

Library Preparation



Human 172-Gene Mutation Detection Kit

Sequencing



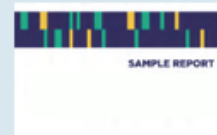
Mainstream Sequencing Platform

Data analysis



Bioanalysis and variants calling

Report generation



Report Generation

Gene List: 172 Genes Including bMSI with Solid Tumors

Point Mutations (SNVs) and Deletion Variants (Indels) (167 Genes), All Exons 29 Genes*

ABCB4	ACVR2A	AGO2	AKT1	AKT2	AKT3	ALK	APC	AR	ARAF	ARID1A	ARID2
ATM*	ATR	B2M	BAI1	BAI3	BRAF	BRCA1*	BRCA2*	BRD7	BRIP1*	CARD11	CCND1*
CCNE1*	CD274	CDH1	CDK4*	CDK6*	CDKN1B	CDKN2A*	CDKN2B	CHEK1	CHEK2*	CREBBP	CTNNB1
DDR2	DNMT3B	EGFR*	EPHA2	EPHA3	EPHA5	EPHB6	ERBB2*	ERBB3	ERBB4	ERCC3	ERCC4
ESR1	EZH2	FAM135B	FANCA*	FAT1	FAT3	FBXW7	FGF19*	FGFR1*	FGFR2*	FGFR3*	FGFR4
FLT1	FLT3	FLT4	FOXL2	GATA3	GNA11	GNAQ	GNAS	HDAC2*	HDAC9	HRAS	IDH1
IDH2	IKZF1	JAK1	JAK2	KDM6A	KDR	KEAP1	KIT*	KMT2B	KMT2D	KRAS*	LRP1B
MAP2K1	MAP2K2	MAP2K3	MAP2K4	MAPK1	MAPK3	MAX	MDM2*	MED12	MET*	MLH1	MLH3
MRE11A	MSH2	MSH3	MSH6	MST1	MTOR	MYC*	NEGR1	NF1	NF2	NFE2L2	NOTCH1
NOTCH2	NOTCH3	NOTCH4	NRAS	NRG1	NRG3	NTRK1	NTRK2	NTRK3	NUTM1	PALB2*	PDGFRA
PDGFRB	PHF20L1	PIK3CA*	PIK3R1	PMS1	PMS2	POLD1	POLE	PREX2	PTEN*	PTPRD	PTPRT
RAF1	RB1*	RBM10	RET	RHOA	RICTOR	RNF43	ROBO1	ROS1	RUNX1T1	SEMA3A	SETD2
SF3B1	SLIT2	SMAD2	SMAD3	SMAD4	SMARCA4	SPTA1	STK11*	TCF7L2	TERT	TGFBR2	TMPPRS13
TP53*	TSC1	TSC2	U2AF1	UBR5	VEGFA	VEGFB	VHL	WT1	ZNF814	MUC16	

Amplifications (16 Genes)

CCND1	CCNE1	CDK4	CDK6	EGFR	ERBB2	FGF19	FGFR1	FGFR2	FGFR3	KIT	KRAS
MDM2	MET	MYC	PIK3CA								

Fusions (16 Genes)

ALK	CD74	EGFR	EML4	ETV6	FGFR1	FGFR2	FGFR3	LTK	NTRK1	NTRK2	NTRK3
RAF1	RET	ROS1	SDC4								

Chemotherapy Associated Variants

DPYD	UGT1A1										
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Company Introduction

Genetron Health is a leading precision mole oncology platform company in China. We specialize in the research and application of cancer genomics, providing early screening, medication guidance, prognosis & monitoring, and new cancer drug development services that cover the entire spectrum of cancer management. We are committed to applying innovative technology to cancer related detection and treatment and to ultimately defeating cancer.

Vision

Healing cancer through relentless exploration and innovation in cancer genomics

Mission

Defeat cancer, protect life



EARLY SCREENING

DETECTION & MONITORING

BIOPHARMA DEVELOPMENT SERVICES



Our Proprietary Technology

- One-step Seq Method
- Mutation Capsule



Our Global Recognition

- CAP CLIA ISO 15189

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