

Table SI. DNA customized cancer panel for detection of SNV, CNV and INDEL.

AKT1	CDKN1A	FGFR3	KRAS	RET
ALK	CDKN2A	FH	MAP2K1	RHOA
APC	CDKN2B	FHIT	MET	RICTOR
AR	CHEK2	FOXA1	MITF	SETD2
ARAF	CREBBP	GATA3	MYC	SMAD4
ARID1A	CTNNB1	GNA11	MYCN	SMARCB1
ARID1B	DDR2	GNAQ	NF1	SMO
ARID2	EGFR	GNAS	NRAS	SPOP
ATM	EP300	HNF1A	PBRM1	SRC
ATRX	ERBB2	HRAS	PDGFRA	STK11
AXIN1	ERBB3	IDH1	PIK3CA	TGFBR2
BAP1	ERBB4	IDH2	PIK3R1	TP53
BRAF	ESR1	KDM6A	POLE	VHL
BRCA1	FBXW7	KDR	PTEN	SMAD2
BRCA2	FGFR1	KIT	RAC1	TSC1
CDH1	FGFR2	KMT2C	RB1	TSC2

SNV, single nucleotide variation; CNV, copy number variation; INDEL, insertion and deletion.

Table SII. RNA customized cancer panel for detection of gene translocation and/or fusion.

---

AKT3	ETV1	MITF	RET	ERG
ALK	ETV4	NCOA2	ROS1	FLI1
BRAF	ETV5	NRG1	RSPO2	PRKDC
CLDN18	FGFR1	NTRK1	RSPO3	ESR1
EGFR	FGFR2	NTRK2	TCF7L2	MET
ERBB2	FGFR3	NTRK3	TFE3	RAF1

---