

About Guardant360 Tissue

A next-generation tissue test analyzing 742 DNA genes and fusions in 367 RNA genes, plus TMB, MSI status, and methylation-based features.*

Test specifications

Sample input	Sample specifications ¹	Turnaround time
6 slides (+ 1 for H&E) Each IHC assessment requires one or more additional slides	Surface area $\geq 2\text{mm}^2$ Tumor content $\geq 5\%$ tumor nuclei (required)	11-day turnaround time from sample receipt to results [†]

Performance specifications[‡]

		Reportable Range	Limit of Detection at 95% Sensitivity [§]	Specificity
DNA	SNVs	≥1% VAF	1.3%	>99.9%
	Indels	≥1% VAF	1.4%	>99.9%
	CNAs	≥2.5 copies	3.5 copies	100%
	CNLs [¶]	≥30%	37.9%	100%
	Fusions / Rearrangements	≥0.1% VAF	0.4%	100%
	MSI Status	MSI-High	3.3% [#]	100%
	Promoter Methylation	≥5 molecules	1.8%	100%
RNA	Fusions / Rearrangements	≥3 molecules	15.1 copies	100% at the gene level

*RNA is automatically included but providers can opt out via the Test Requisition Form.

[†]Median turnaround time from sample receipt to results.

[‡]Analyzed in cases with 50 ng DNA input and 25 ng RNA input.

[§]Limit of detection (LoD) defined as the allele fraction/copy number at which the test has a 95% probability of detection for oncogenic variants and genes with relevance in guidelines, drug labels, and clinical trials.

[¶]Reportable range and limit of detection are defined as tumor fraction at which deletion(s) are detectable.

[#]Percent Tumor Count.

CNA: Copy Number Amplification; CNL: Copy Number Loss; DNA: Deoxyribonucleic acid; H&E: Hematoxylin and eosin; IHC: Immunohistochemistry; MSI: Microsatellite Instability; RNA: Ribonucleic acid; SNV: Single Nucleotide Variant; TMB: Tumor Mutation Burden; VAF: Variant Allele Frequency.

Reference: 1. RPT-013121.

Important Note: Guardant360 Tissue was developed as a Laboratory Developed Test (LDT) and its performance characteristics determined by the Guardant Health Clinical Laboratory in Redwood City, CA, USA, which is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA) as qualified to perform high-complexity testing. This test has not been cleared or approved by the US FDA.

Client Services: 1.855.698.8887 clientservices@guardanthealth.com guardantcomplete.com

Gene Panel

MSI status - Qualitative result

TMB - Mutations per megabase

IHC - See separate offerings

DNA (742)

ABCB1	B2M ^{§§}	CCNE1 ^{**}	CTLA4	EGFR ^{**}	EZH1	FOXA1	HELO	KAT6B	MARK2	NFKBIA	PDE7A	PRKAR1A	RHEB	SLFN11	TBC1D7	U2AF1
ABL1	BABAM1	CCNE2	CTNNA1	EIF1AX	EZH2	FOXL2	HES1	KDM4A	MAX	NHEJ1	PDGFRA ^{**}	PRKCI	RHOA	SLIT2	TBX3	UBE2T
ABL2	BABAM2	CD274	CTNNB1	EIF4A1	FAAP100	FOXO1	HEY1	KDM5A	MCL1	NKX2-1	PDGFRB	PRKDC	RHOB	SMAD2	TCERG1	UGT1A1
ABRAXAS1	BAP1	CD276	CUL3	EIF4A2	FAAP20	FOXP1	HEYL	KDM5B	MDC1	NOTCH1	PDK1	PRKN	RICTOR	SMAD3	TCF7L2	UIMC1
ACVR1	BARO1	CD74	CUL4A	EIF4A3	FAAP24	FRS2	HGF	KDM5C	MDM2	NOTCH2	PDPK1	PRMT5	RIF1	SMAD4 ^{§§}	TEK	ULBP1
ACVR1B	BCL2	CD79A	CUX1	EIF4B	FANCA ^{§§}	FUBP1	HNF1A	KDM6A	MDM4	NOTCH3	PHF6	PRPF40B	RILPL1	SMARCA2	TEN1	ULBP3
ACVR2A	BCL2L1	CD79B	CWC22	EIF4E	FANCB	FUBP3	HNRNPDL	KDR	MED12	NOTCH4	PHLPP1	PRPF4B	RIT1	SMARCA4	TENT5C	USP28
ADARB2	BCL2L2	CDC27	CXCR4	EIF4E2	FANCC	FUS	HOXB13	KEAP1 ^{†††§§}	MEF2B	NOVA1	PHLPP2	PSENEN	RNASEH2B	SMARCA1	TERT	USP7
ADGRA2	BCL6	CDC5L	CYLD	ELAVL1	FANCD2	FYN	HRAS	KIN	MEN1	NPM1	PHOX2B	PSMB10	RNF43	SMARCB1	TET1	USP9X
ADGRG4	BCOR	CDC7	CYP17A1	ELAVL2	FANCE ^{§§}	FZD1	HSD3B1	KIT ^{**}	MERTK	NPRL2	PIAS4	PSMB8	ROBO1	SMARCD1	TET2	VEGFA
AFDN	BCORL1	CDC73	CYP19A1	ELF3	FANCF ^{§§}	FZD10	HSP90AA1	KLF4	MET ^{**}	NPRL3	PIK3C2B	PSMB9	ROBO2	SMARCE1	TFE3	VEGFB
AGGF1	BCR	CDH1 ^{§§}	CYP2C19	ELOC	FANCG ^{§§}	FZD2	ICOSLG	KLHL6	MGA	NRAS	PIK3CA ^{**}	PTCH1	ROS1 [§]	SMC1A	TFRC	VHL
AIP	BIRC5	CDH6	CYP3A4	EMLA	FANCI	FZD3	ID3	KLHL9	MGMT ^{††}	NRG1 [§]	PIK3CB	PTDSS1	RPA1	SMC3	TGFBF1	VIRMA
AKT1	BLM	CDK11A	DAXX	EMSY	FANCL ^{§§}	FZD4	IDH1	KMT2A	MITF	NSD1	PIK3CD	PTEN ^{†††§§}	RPS27A	SMO	TGFBF2	WBP11
AKT1S1	BMPR1A	CDK12 ^{†††§§}	DCUN1D1	EP300	FANCM	FZD5	IDH2	KMT2B	MKNK1	NSD2	PIK3CG	PTPN11	RPS6KA3	SNAIP	THRAP3	WEE1
AKT2	BRAF ^{**}	CDK4 ^{**}	DDIT3	EPAS1	FAS	FZD6	IDO1	KMT2C	MLH1 ^{§§}	NSD3	PIK3R1	PTPN2	RPS6KB1	SOC1	TIA1	WRN
AKT3	BRCA1 ^{†††§§}	CDK6 ^{**}	DDR1	EPCAM	FAT1	FZD7	IFNG	KMT2D	MLH3	NSRP1	PIK3R2	PTPRD	RPS6KB2	SOC3	TIPARP	WT1
ALB	BRCA2 ^{†††§§}	CDK7	DDR2	EPHA3	FBXW7	FZD8	IFNGR1	KNSTRN	MLST8	NTHL1	PIK3R3	PTPRS	RPTOR	SOS1	TMEM127	W/WP1
ALK [§]	BRCC3	CDK8	DDX17	EPHA5	FCGR2A	FZD9	IFNGR2	KRAS ^{**}	MPL	NTRK1 [§]	PIM1	PTPRT	RRAC	SOX10	TMPSR2	XBP1
ALOX12B	BRD2	CDKN1A	DDX18	EPHA7	FCGR3A	GAS6	IFNW1	LATS1	MARAS	NTRK2 [§]	PIN1	QKI	RSP01	SOX17	TNFAIP3	XPA
ALOX15B	BRD3	CDKN1B ^{§§}	DDX27	EPHB1	FEN1	GATA1	IGF1	LGR4	MRE11	NTRK3 [§]	PKM	RAB35	RSP02	SOX2	TNFRSF14	XPC
ALOX5	BRD4	CDKN1C	DDX3X	ERBB2 ^{**}	FGF1	GATA2	IGF1R	LGR5	MSH2 ^{§§}	NUMA1	PLCG2	RAC1	RSP04	SOX9	TNFRSF1A	XPO1
AMER1	BRIP1 ^{§§}	CDKN2A ^{†††§§}	DDX41	ERBB3	FGF10	GATA3	IGF2	LGR6	MSH3	NUMB	PLEKHS1	RAD18	RUNX1	SPEN	TNK2	XRCC1
APC ^{§§}	BSG	CDKN2B	DEPDC5	ERBB4	FGF12	GATA4	IGF2BP3	LIG1	MSH6 ^{§§}	NUP93	PLRG1	RAD21	RUNX1T1	SPOP	TNPO1	XRCC2
APEX1	BTG1	CDKN2C	DEPTOR	ERCC1	FGF14	GATA6	IGF2R	LIG4	MTAP ^{†††§§}	NUTM1	PMS1	RAD50 ^{§§}	RXRA	SRC	TOP1	XRCC3
APLN	BTG2	CEBPA	DHX15	ERCC2	FGF19	GEN1	IKBKE	LMO1	MTHFR	P2RY8	PMS2 ^{§§}	RAD51 ^{§§}	RYBP	SRSF2	TOP2A	XRCC4
AR ^{**}	BTIK	CELFA4	DHX16	ERCC3	FGF2	GID4	IKZF1	LRP1B	MTOR	PABPC1	POLA1	RAD51B	SAMHD1	SRY	TOPAZ1	XRCC5
ARAF	BUB1B	CEP250	DHX36	ERCC4	FGF23	GLI1	IL1R1	LRP2	MUTYH ^{§§}	PAK1	POLD1	RAD51C ^{†††§§}	SDC4	SS18	TP53 ^{§§}	XRCC6
ARFRP1	C9orf78	CFAP20	DHX9	ERCC5	FGF3	GNA11	IL2RA	LRP5	MYB	PAK3	POLE ^{§§}	RAD51D ^{†††§§}	SDHA ^{§§}	STAG2	TP53BP1	YAP1
ARHGAP35	CALR	CHD4	DICER1	ERCC6	FGF4	GNA13	IL2RB	LRP6	MYC ^{**}	PALB2 ^{†††§§}	POLH	RAD52	SDHAF2	STAT1	TP63	YES1
ARID1A ^{§§}	CARD11	CHEK1 ^{§§}	DIS3L2	ERCC6L2	FGF5	GNAQ	IL2RG	LTK	MYCL	PARG	POLQ	RAD54L	SDHB ^{§§}	STAT3	TP73	ZC3H13
ARID1B ^{§§}	CASP8	CHEK2 ^{†††§§}	DLL4	ERCC8	FGF6	GNAS	IL7R	LYN	MYCN ^{**}	PARP1	POT1	RAE1E	SDHC ^{§§}	STAT4	TPMT	ZC3H18
ARID2	CASR	CIC	DNAJB1	EREG	FGF7	GPATCH8	INHBA	LZTR1	MYD88	PARP2	POU2F2	RAF1 ^{**}	SDHD ^{§§}	STK11 ^{†††§§}	TRAF2	ZC3H4
ASXL1	CAV1	CLDN18	DNMT1	ERF	FGF8	GPC3	INPP4B	MAD2L2	MYOD1	PAX3	PPARG	RARA	SEM1	STK19	TRAF3	ZMYM3
ATM ^{†††§§}	CBFB	CTMT4	DNMT3A	ERG	FGF9	GREM1	INTS6L	MALT1	NAB2	PAX5	PIIG	RASA1	SERPINB3	STK40	TRAF7	ZNF217
ATMIN	CBL	CTMT6	DNMT3B	ERRF1	FGFR1 ^{**}	GRIN2A	IRF1	MAP2K1	NBN	PAX7	PPM1D	RB1 ^{†††§§}	SERPINB4	STN1	TRIM24	ZNF703
ATR ^{§§}	CBLB	CNOT3	DOT1L	FGFR2 ^{**}	FGFR3 ^{**}	GSK3B	IRF2	MAP2K2	NCOR1	PAX8	PPP2CA	RBBP6	SEN2	SUFU	TRIP13	ZNF703
ATRX	CCAR1	CREBBP	DPYD	ETS1	FGFR3 [§]	GSTM1	IRF4	MAP2K4	NCR1	PAXIP1	PPP2R1A	RBM10	SETD2	SYK	TSC1	ZRSR2
AURKA	CCNE	CRKL	DUSP4	ETV1	FGFR4	GSTP1	IRS2	MAP3K1	NCR3	PBRM1 ^{§§}	PPP2R2A	RBMX	SF3B1	SYNCRIP	TSC2 ^{§§}	
AURKB	CCNA2	CTRT1	DYNLL1	ETV4	FH	H3-4	JAK1	MAP3K13	NEGR1	PCBP1	PPP3CA	RECQL	SF3B3	TACSTD2	TSHR	
AURKC	CCNB1	CSF1R	DYRK2	ETV5	FLCN	H3F3A	JAK2	MAP4K3	NELFE	PCBP2	PPP6C	RECQL4	SH2D1A	TAF1L	TSHZ2	
AXIN1	CCND1 ^{**}	CSF3R	E2F3	ETV6	FLT1	HACD4	JAK3	MAPK1	NF2 ^{§§}	PCDH15	PRDM1	RET [§]	SHLD1	TAP1	TYMP	
AXIN2	CCND2 ^{**}	CTC1	ECT2L	EWSR1	FLT3	HDAC2	JUN	MAPK3	NF2 ^{§§}	PDCD1	PREX1	REV3L	SHLD2	TAP2	TYMS	
AXL	CCND3	CTCF	EFTUD2	EXO1	FLT4	HDAC6	KAT6A	MAPKAP1	NFE2L2	PDCD1LG2	PREX2	RGS1	SLC34A2	TAPBP	TYRO3	

RNA (367)

AAAS	BCL10	CCDC32	CLIP1	EBF1	FGFR1	GRM1	JAK3	MAP2K1	MRTFA	NFIB	NUTM2A	PIK3CA	RAD51B	SLC1A2	TCF12	UBA1
ABL1	BCL11B	CCNB3	CLTC	EGF	FGFR2	HINFP	JAZF1	MAST1	MRTFB	NFIX	OGA	PKN1	RAD51C	SLC45A2	TCF3	UBTF
ABL2	BCL2	CCND1	COG8	EGFR ^{**}	FGFR3	HLF	KANSL1	MAST2	MSANTD3	NFKB2	OPHN1	PLAG1	RAF1	SLC45A3	TCL1A	USP6
ACSL6	BCL6	CCND2	CPSF6	ELL	FGFR4	HMGAA2	KAT6A	MBTD1	MSMB	NIPBL	PAG1	PLAGL1	RARA	SMARCA2	TEC	VGLL2
ACVR2A	BCOR	CCND3	CREB1	EMLA	FGR	HRAS	KAT6B	MCRS1	MTOR	NOTCH1	PALB2	PML	RARG	SNRNP27	TERT	VGLL3
AFDN	BCORL1	CCR4	CREB3L1	EP300	FIP1L1	HTN3	KDM2A	MDM2	MUSK	NOTCH2	PAN3	POU2AF3	RASGRF1	SRF	TET1	VIM
AFF1	BCR	CD274	CREB3L2	EPC1	FLI1	HTRA1	KDM5A	MDM4	MUTYH	NOTCH3	PAX3	PPARG	RB1	SS18	TFCP2	WDR33
AFF2	BEND2	CD38	CREBBP	EPOR	FLT3	ICA1L	KEAP1	MEAF6	MYB	NOTCH4	PAX5	PRDM1	RBM15	SS18L1	TFE3	WT1
AKT1	BIRC3	CD74	CREM	ERBB2	FOS	IDH1	KIF5B	MECOM	MYBL1	NPM1	PAX7	PRDM10	RELA	SSX1	TFEB	WWTR1
AKT2	BRAF	CDH1	CRTC1	ERBB4	FOSB	IDH2	KIT	MED26	MYC	NR4A3	PAX8	PRDM16	RET	SSX2	TFG	YAP1
AKT3	BRCA1	CDK12	CSF1	ERG	FOXO1	IGF1R	KLF2	MEF2D	MYH11	NRAS	PBX1	PRKACA	RNF10	SSX4	TGFBF3	YWHAE
ALK	BRCA2	CDK6	CSF1R	ESR1	FOXO4	IKZF1	KMT2A	MERTK	MYOD1	NRF1	PBX3	PRKACB	ROS1	ST3GAL1	THADA	ZBTB16
AMACR	BRD3	CDKN2A	CTNNB1	ESRRA	FOXP1	IKZF2	KRAS	MET ^{**}	NAB2	NRG1	PCM1	PRKCA	RPN1	STAT5B	TMPSR2	ZCCHC7
ANAPC10	BRD4	CDX2	CXCR3	ETV1	FOXR2	IKZF3	LMO1	MGMT	NACC1	NSD1	PDCD1LG2	PRKCB	RREB1	STAT6	TNFRSF17	ZNF362
AR ^{**}	BTG1	CEBPE	CXXC5	ETV4	FUS	IL12RB1	LTK	MITF	NCOA1	NSD2	PDGFB	PRKCD	RRP8	STK11	TOP1	ZNF384
ARHGAP26	C11orf95	CHEK1	DDIT3	ETV5	GATA2	IL3	LYN	MLF1	NCOA2	NTRK1	PDGFD	PRKD1	RSP02	STK24	TRAPPC12	
ARHGAP6	CAMTA1	CHEK2	DEK	ETV6	GATA3	INSR	MAF	MLH1	NCOA3	NTRK2	PDGFRA	PRKD2	RSP03	SUZ12	TP63	
ATF1	CAPZB	CHIC2	DENND10	EWSR1	GLI1	IRF2BP2	MAFA	MLL1	NDUFAF7	NTRK3	PDGFRB	PRKD3	RUNX1	SYF2	TRAPPC12	
ATM	CARD11	CIAO1	DEPDC5	EXOSC1	GLI2	IRF4	MAFB	MLL1T30	NF1	NUMBL	PGR	PTCH1	RUNX1T1	SYK	TRIM11	
ATR	CBFA2T3	CIC	DNAJB1	FANCA	GLIS2	ITK	MALT1	MLL1T3	NF2	NUP214	PHF1	PTK2B	SEC61G	TAF15	TRMT11	
ATXN7L3	CBFB	CIITA	DUSP22	FER	GRB7	JAK1	MAML2	MN1	NFATC2	NUP98	PHKB	PVT1	SETD2	TBL1XR1	TYK2	
AXL	CBL	CLDN18	DUX4	FGF1	GREB1	JAK2	MAN2A1	MNX1	NFE2L2	NUTM1	PICALM	QKI	SFMBT1	TBX21	TYRO3	

[†]Includes Fusion/Rearrangement ^{††}Includes Copy Number Amplification ^{†††}Includes Copy Number Loss ^{††††}Includes RNA Splice Variant/Exon Skipping ^{§§§}Includes Promoter Methylation ^{§§}Promoter Methylation only