

Genes Analyzed

206 full exon coverage and CNV Loss genes

ABRAXAS1	ACVR1B	ACVR2A	ADAMTS12	ADAMTS2	AMER1	APC	ARHGAP35	ARID1A	ARID1B
ARID2	ARID5B	ASXL1	ASXL2	ATM	ATR	ATRX	AXIN1	AXIN2	B2M
BAP1	BARD1	BCOR	BLM	BMPR2	BRCA1	BRCA2	BRIP1	CASP8	CBFB
CD274	CD276	CDC73	CDH1	CDH10	CDK12	CDKN1A	CDKN1B	CDKN2A	CDKN2B
CDKN2C	CHEK1	CHEK2	CIC	CREBBP	CSMD3	CTCF	CTLA4	CUL3	CUL4A
CUL4B	CYLD	CYP2C9	DAXX	DDX3X	DICER1	DNMT3A	DOCK3	DPYD	DSC1
DSC3	ELF3	ENO1	EP300	EPCAM	EPHA2	ERAP1	ERAP2	ERCC2	ERCC4
ERRFI1	ETV6	FANCA	FANCC	FANCD2	FANCE	FANCF	FANCG	FANCI	FANCL
FANCM	FAT1	FBXW7	FUBP1	GATA3	GNA13	GPS2	HDAC2	HDAC9	HLA-A
HLA-B	HNF1A	INPP4B	JAK1	JAK2	JAK3	KDM5C	KDM6A	KEAP1	KMT2A
KMT2B	KMT2C	KMT2D	LARP4B	LATS1	LATS2	MAP2K4	MAP2K7	MAP3K1	MAP3K4
MAPK8	MEN1	MGA	MLH1	MLH3	MRE11	MSH2	MSH3	MSH6	MTAP
MUTYH	NBN	NCOR1	NF1	NF2	NOTCH1	NOTCH2	NOTCH3	NOTCH4	PALB2
PARP1	PARP2	PARP3	PARP4	PBRM1	PDCD1	PDCD1LG2	PDIA3	PGD	PHF6
PIK3R1	PMS1	PMS2	POLD1	POLE	POT1	PPM1D	PPP2R2A	PRDM1	PRDM9
PRKAR1A	PTCH1	PTEN	PTPRT	RAD50	RAD51	RAD51B	RAD51C	RAD51D	RAD52
RAD54L	RASA1	RASA2	RB1	RBM10	RECQL4	RNASEH2A	RNASEH2B	RNF43	RPA1
RUNX1	SDHA	SDHB	SDHD	SETD2	SLX4	SMAD2	SMAD4	SMARCA4	SMARCB1
SOX9	SPEN	STAG2	STK11	SUFU	TAP1	TAP2	TBX3	TCF7L2	TET2
TGFBR2	TNFAIP3	TNFRSF14	TP53	TP63	TPP2	TSC1	TSC2	USP9X	VHL
WT1	XRCC2	XRCC3	ZFHX3	ZMYM3	ZRSR2				

21 full exon coverage genes

CALR	CIITA	CYP2D6	ERCC5	FAS	ID3	KLHL13	MTUS2	PSMB10	PSMB8
PSMB9	RNASEH2C	RPL22	RPL5	RUNX1T1	SDHC	SOCS1	STAT1	TMEM132D	UGT1A1
ZBTB20									

108 Hotspot and CNV genes

ABL1	ABL2	AKT1	AKT2	AKT3	ALK	AR	ARAF	AURKA	AURKC
AXL	BCL2	BCL2L12	BCL6	BRAF	CARD11	CBL	CCND1	CCND2	CCND3
CCNE1	CDK4	CDK6	CHD4	DDR2	EGFR	EIF1AX	ERBB2	ERBB3	ERBB4
ESR1	EZH2	FAM135B	FGFR1	FGFR2	FGFR3	FGFR4	FLT3	FLT4	FOXA1
GATA2	GNAS	H3F3A	H3F3B	IDH2	IKBKB	IL7R	KDR	KIT	KLF5
KRAS	MAGOH	MAP2K1	MAPK1	MAX	MDM4	MECOM	MEF2B	MET	MITF
MPL	MTOR	MYC	MYCN	MYD88	NFE2L2	NRAS	NTRK1	NTRK3	PCBP1

PDGFRA	PDGFRB	PIK3C2B	PIK3CA	PIK3CB	PIK3R2	PIM1	PLCG1	PPP2R1A	PPP6C
PRKACA	PTPN11	PXDNL	RAC1	RAF1	RARA	RET	RHEB	RICTOR	RIT1
ROS1	SETBP1	SF3B1	SLCO1B3	SMC1A	SMO	SPOP	SRC	STAT3	STAT6
TERT	TOP1	TPMT	U2AF1	USP8	XPO1	ZNF217	ZNF429		
<b>61 hotspot genes</b>									
ACVR1	ATP1A1	AURKB	BCR	BMP5	BTK	CACNA1D	CD79B	CSF1R	CTNNB1
CUL1	CYSLTR2	DGCR8	DROSHA	E2F1	EPAS1	FGF7	FOXL2	FOXO1	GLI1
GNA11	GNAQ	HIF1A	HIST1H1E	HIST1H2BD	HIST1H3B	HRAS	IDH1	IL6ST	IRF4
IRS4	KCNJ5	KLF4	KNSTRN	MAP2K2	MED12	MYOD1	NSD2	NT5C2	NTRK2
NUP93	PAX5	PIK3CD	PIK3CG	PTPRD	RGS7	RHOA	RPL10	SIX1	SIX2
SNCAIP	SOS1	SOX2	SRSF2	STAT5B	TAF1	TGFBR1	TOP2A	TRRAP	TSHR
WAS									
<b>19 CNV Gain genes</b>									
ABCB1	CTNND2	DDR1	EMSY	FGF19	FGF23	FGF3	FGF4	FGF9	FYN
GLI3	IGF1R	MCL1	MDM2	MYCL	RPS6KB1	RPTOR	YAP1	YES1	
<b>86 TMB only genes</b>									
A1CF	ACSM2B	ADAM18	ANO4	ARMC4	BRINP3	C6	C8A	C8B	CANX
CASR	CD163	CNTN6	CNTNAP4	CNTNAP5	COL11A1	DCAF4L2	DCDC1	GALNT17	GPR158
GRID2	HCN1	HLA-C	KCND2	KCNH7	KEL	KIR3DL1	KRTAP2-1	KRTAP6-2	LRRC7
MARCO	NLRC5	NOL4	NRXN1	NYAP2	OR10G8	OR2G6	OR2L13	OR2L2	OR2L8
OR2M3	OR2T3	OR2T33	OR2T4	OR2W3	OR4A15	OR4C15	OR4C6	OR4M1	OR4M2
OR5D18	OR5F1	OR5L1	OR5L2	OR6F1	OR8H2	OR8I2	OR8U1	ORC4	PAK5
PCDH17	PDE1A	PDE1C	PLXDC2	POM121L12	PPFIA2	RBP3	REG1A	REG1B	REG3A
REG3G	RPTN	RUNDC3B	SH3RF2	SLC15A2	SLC8A1	SYT10	SYT16	TAPBP	TPTE
TRHDE	TRIM48	TRIM51	ZIM3	ZNF479	ZNF536				
<b>51 Fusion drivers genes</b>									
AKT2	ALK	AR	AXL	BRAF	BRCA1	BRCA2	CDKN2A	EGFR	ERBB2
ERBB4	ERG	ESR1	ETV1	ETV4	ETV5	FGFR1	FGFR2	FGFR3	FGR
FLT3	JAK2	KRAS	MDM4	MET	MYB	MYBL1	NF1	NOTCH1	NOTCH4
NRG1	NTRK1	NTRK2	NTRK3	NUTM1	PDGFRA	PDGFRB	PIK3CA	PPARG	PRKACA
PRKACB	PTEN	RAD51B	RAF1	RB1	RELA	RET	ROS1	RSPO2	RSPO3
TERT									

\*\*Genes of the homologous recombination (HR) complex are in blue color