

Gene List with Full Coding Exonic Regions for SNVs, InDels, Rearrangements, and CNAs							
ABL1	ACVR1B	AKT1	AKT2	AKT3	ALK	ALOX12B	AMER1/FAM123B*
APC	AR	ARAF	ARFRP1	ARID1A	ASXL1	ATM	ATR
ATRX	AURKA	AURKB	AXIN1	AXL	B2M	BAP1	BARD1
BCL2	BCL2L1	BCL2L2	BCL6	BCOR	BCORL1	BRAF	BRCA1
BRCA2	BRD4	BRIP1	BTG1	BTG2	BTB	CALR	CARD11
CASP8	CBFB	CBL	CCND1	CCND2	CCND3	CCNE1	CD22
CD274/PD-L1	CD70	CD79A	CD79B	CDC73	CDH1	CDK12	CDK4
CDK6	CDK8	CDKN1A	CDKN1B	CDKN2A	CDKN2B	CDKN2C	CEBPA
CHEK1	CHEK2	CIC	CREBBP	CRKL	CSF1R	CSF3R	CTCF
CTNNA1	CTNNB1	CUL3	CUL4A	CXCR4	CYP17A1	DAXX	DDR1
DDR2	DICER1	DIS3	DNMT3A	DOT1L	EED	EGFR	EMSY/C11ORF30
EP300	EPHA3	EPHB1	EPHB4	ERBB2	ERBB3	ERBB4	ERCC4
ERG	ERRFI1	ESR1	ETV6	EZH2	FANCA	FANCC	FANCG
FANCL	FAS	FBXW7	FGF10	FGF12	FGF14	FGF19	FGF23
FGF3	FGF4	FGF6	FGFR1	FGFR2	FGFR3	FGFR4	FH
FLCN	FLT1	FLT3	FOXO2*	FUBP1	GABRA6	GATA3	GATA4
GATA6	GID4/C17ORF39	GNA11	GNA13	GNAQ	GNAS	GRM3	GSK3B
H3-3A/H3F3A	HDAC1	HGF	HNF1A	HRAS	HSD3B1	ID3	IDH1
IDH2	IGF1R	IKBKE	IKZF1	IKZF2	IKZF3	INPP4B	IRF2
IRF4	IRS2	JAK1	JAK2	JAK3	JUN	KDM5A	KDM5C
KDM6A	KDR	KEAP1	KEL	KIT	KLHL6	KMT2A/MLL	KMT2D/MLL2
KRAS	LTK	LYN	MAF	MAP2K1/MEK1	MAP2K2/MEK2	MAP2K4	MAP3K1
MAP3K13	MAPK1	MCL1	MDM2	MDM4	MED12	MEF2B	MEN1
MERTK	MET	MITF	MKNK1	MLH1	MPL	MRE11A	MSH2
MSH3	MSH6	MST1R	MTAP	MTOR	MUTYH	MYC	MYCL/MYCL1
MYCN	MYD88	NBN	NF1	NF2	NFE2L2	NFKBIA	NKX2-1
NOTCH1	NOTCH2	NOTCH3	NOTCH4	NPM1	NRAS	NSD2/WHSC1/MSET	NSD3/WHSC1L1
NT5C2	NTRK1	NTRK2	NTRK3	P2RY8*	PALB2	PARP1	PARP2
PARP3	PAX5	PBRM1	PDCD1/PD-1	PDCD1LG2/PD-L2	PDGFRA	PDGFRB	PKD1
PIK3C2B	PIK3C2G	PIK3CA	PIK3CB	PIK3R1	PIM1	PLCG2	PMS2
POLD1	POLE	PPARG	PPP2R1A	PPP2R2A	PRDM1	PRKAR1A	PRKCI
PRKN/PARK2	PTCH1	PTEN	PTPN11	PTPRO	QKI	RAC1	RAD21
RAD51	RAD51B	RAD51C	RAD51D	RAD52	RAD54L	RAF1	RARA
RB1	RBM10	REL	RET	RICTOR	RNF43	ROS1	RPTOR
RUNX1	SDHA	SDHB	SDHC	SDHD	SETD2	SF3B1	SGK1
SMAD2	SMAD4	SMARCA4	SMARCB1	SMO	SNCAIP	SOC1*	SOX2
SOX9	SPEN	SPOP	SRC	SRSF2	STAG2	STAT3	STK11
SUFU	SYK	TBX3	TEK	TENT5C/FAM46C*	TET2	TGFBR2	TIPARP
TNFAIP3	TNFRSF14	TP53	TP53BP1	TSC1	TSC2	TYRO3	U2AF1
VEGFA	VHL	WT1	XPO1	XRCC2	ZEB2	ZNF217	ZNF703
ZRSR2							

ABL1, ACVR1B, AKT1, AKT2, AKT3, ALK, ALOX12B, AMER1/FAM123B*, APC, AR, ARAF, ARFRP1, ARID1A, ASXL1, ATM, ATR, ATRX, AURKA, AURKB, AXIN1, AXL, B2M, BAP1, BARD1, BCL2, BCL2L1, BCL2L2, BCL6, BCOR, BCORL1, BRAF,

BRCA1, BRCA2, BRD4, BRIP1, BTG1, BTG2, BTK, CALR, CARD11, CASP8, CBF, CBL, CCND1, CCND2, CCND3, CCNE1, CD22, CD274/PD-L1, CD70, CD79A, CD79B, CDC73, CDH1, CDK12, CDK4, CDK6, CDK8, CDKN1A, CDKN1B, CDKN2A, CDKN2B, CDKN2C, CEBPA, CHEK1, CHEK2, CIC, CREBBP, CRKL, CSF1R, CSF3R, CTCF, CTNNA1, CTNNB1, CUL3, CUL4A, CXCR4, CYP17A1, DAXX, DDR1, DDR2, DICER1, DIS3, DNMT3A, DOT1L, EED, EGFR, EMSY/C11ORF30, EP300, EPHA3, EPHB1, EPHB4, ERBB2, ERBB3, ERBB4, ERCC4, ERG, ERFF1, ESR1, ETV6, EZH2, FANCA, FANCC, FANCG, FANCL, FAS, FBXW7, FGF10, FGF12, FGF14, FGF19, FGF23, FGF3, FGF4, FGF6, FGFR1, FGFR2, FGFR3, FGFR4, FH, FLCN, FLT1, FLT3, FOXL2*, FUBP1, GABRA6, GATA3, GATA4, GATA6, GID4/C17ORF39, GNA11, GNA13, GNAQ, GNAS, GRM3, GSK3B, H3-3A/H3F3A, HDAC1, HGF, HNF1A, HRAS, HSD3B1, ID3, IDH1, IDH2, IGF1R, IKBKE, IKZF1, IKZF2, IKZF3, INPP4B, IRF2, IRF4, IRS2, JAK1, JAK2, JAK3, JUN, KDM5A, KDM5C, KDM6A, KDR, KEAP1, KEL, KIT, KLHL6, KMT2A/MLL, KMT2D/MLL2, KRAS, LTK, LYN, MAF, MAP2K1/MEK1, MAP2K2/MEK2, MAP2K4, MAP3K1, MAP3K13, MAPK1, MCL1, MDM2, MDM4, MED12, MEF2B, MEN1, MERTK, MET, MITF, MKNK1, MLH1, MPL, MRE11A, MSH2, MSH3, MSH6, MST1R, MTAP, MTOR, MUTYH, MYC, MYCL/MYCL1, MYCN, MYD88, NBN, NF1, NF2, NFE2L2, NFKBIA, NKX2-1, NOTCH1, NOTCH2, NOTCH3, NOTCH4, NPM1, NRAS, NSD2/WHSC1/MMSET, NSD3/WHSC1L1, NT5C2, NTRK1, NTRK2, NTRK3, P2RY8*, PALB2, PARP1, PARP2, PARP3, PAX5, PBRM1, PDCD1/PD-1, PDCD1LG2/PD-L2, PDGFRA, PDGFRB, PDK1, PIK3C2B, PIK3C2G, PIK3CA, PIK3CB, PIK3R1, PIM1, PLCG2, PMS2, POLD1, POLE, PPARG, PPP2R1A, PPP2R2A, PRDM1, PRKAR1A, PRKCI, PRKN/PARK2, PTCH1, PTEN, PTPN11, PTPRO, QKI, RAC1, RAD21, RAD51, RAD51B, RAD51C, RAD51D, RAD52, RAD54L, RAF1, RARA, RB1, RBM10, REL, RET, RICTOR, RNF43, ROS1, RPTOR, RUNX1, SDHA, SDHB, SDHC, SDHD, SETD2, SF3B1, SGK1, SMAD2, SMAD4, SMARCA4, SMARCB1, SMO, SNCAIP, SOCS1*, SOX2, SOX9, SPEN, SPOP, SRC, SRSF2, STAG2, STAT3, STK11, SUFU, SYK, TBX3, TEK, TENT5C/FAM46C*, TET2, TGFB2, TIPARP, TNFAIP3, TNFRSF14, TP53, TP53BP1, TSC1, TSC2, TYRO3, U2AF1, VEGFA, VHL, WT1, XPO1, XRCC2, ZEB2, ZNF217, ZNF703, ZRSR2

*CNAs are not reported for these five genes, AMER1 (FAM123B), FOXL2, P2RY8, SOCS1, and TENT5C (FAM46C).

Select Intronic Regions for the Enhanced Detection of Gene Rearrangements, a Promoter Region, and One ncRNA (non-coding RNA) Gene							
ALK <i>introns 18, 19</i>	BCL2 <i>3'UTR</i>	BCR <i>introns 8, 13, 14</i>	BRAF <i>introns 7-10</i>	BRCA1 <i>introns 2, 7, 8, 12, 16, 19, 20</i>	BRCA2 <i>intron 2</i>	CD74 <i>introns 6-8</i>	EGFR <i>introns 7, 15, 24-27</i>
ETV4 <i>intron 8</i>	ETV5 <i>introns 6, 7</i>	ETV6** <i>introns 5, 6</i>	EWSR1 <i>introns 7-13</i>	EZR <i>introns 9- 11</i>	FGFR1 <i>introns 1, 5, 17</i>	FGFR2 <i>introns 1, 17</i>	FGFR3 <i>intron 17</i>
KIT <i>intron 16</i>	KMT2A / MLL <i>introns 6-11</i>	MSH2 <i>intron 5</i>	MYB <i>intron 14</i>	MYC <i>intron 1</i>	NOTCH2 <i>intron 26</i>	NTRK1 <i>introns 8-11</i>	NTRK2 <i>intron 12</i>

NUTM1 <i>intron 1</i>	PDGFRA <i>introns 7, 9, 11</i>	RAF1 <i>introns 4-8</i>	RARA <i>intron 2</i>	RET <i>introns 7-11</i>	ROS1 <i>introns 31-35</i>	RSPO2 <i>intron 1</i>	SDC4 <i>intron 2</i>
SLC34A2 <i>intron 4</i>	TERC <i>ncRNA</i>	TERT <i>promoter</i>	TMPRSS2 <i>introns 1-3</i>				

*CNAs are not reported for these five genes, AMER1 (FAM123B), FOXL2, P2RY8, SOCS1, and TENT5C (FAM46C).

**ETV6 is a common rearrangement partner for NTRK3

ALK introns 18, 19, BCL2 3'UTR, BCR introns 8, 13, 14, BRAF introns 7-10, BRCA1 introns 2, 7, 8, 12, 16, 19, 20, BRCA intron 2, CD74 introns 6-8, EGFR introns 7, 15, 24-27, ETV4 intron 8, ETV5 introns 6, 7, ETV6** introns 5, 6, EWSR1 introns 7-13, EZR introns 9-11, FGFR1 introns 1, 5, 17, FGFR2 introns 1, 17, FGFR3 intron 17, KIT intron 16, KMT2A/MLL introns 6-11, MSH2 intron 5, MYB intron 14, MYC intron 1, NOTCH2 intron 26, NTRK1 introns 8-11, NTRK2 intron 12, NUTM1 intron 1, PDGFRA introns 7, 9, 11, RAF1 introns 4-8, RARA intron 2, RET introns 7-11, ROS1 introns 31-35, RSPO2 intron 1, SDC4 intron 2, SLC34A2 intron 4, TERC ncRNA, TERT promoter, TMPRSS2 introns 1-3

**ETV6 is a common rearrangement partner for NTRK3