

GeneTrails Hematologic Malignancies 220 Gene Panel List

ABL1	AKT1	ANKRD26	ARID1A	ARID1B	ASXL1	ASXL2	ATG2B	ATM	ATRX
BCL2	BCL6	BCOR	BCORL1	BIRC3	BIRC6	BLM	BRAF	BRCA1	BRCA2
BRCC3	BRD4	BTK	CALR	CARD11	CASP10	CBL	CBLB	CBLC	CCND1
CCND3	CCR4	CD27	CD79A	CD79B	CDH11	CDKN2A	CDKN2C	CEBPA	CHD2
CHEK2	CREBBP	CRLF2	CSF1R	CSF3R	CTCF	CTLA4	CUX1	CXCR4	DAXX
DDX41	DDX54	DHX15	DHX29	DIS3	DNAH5	DNAH9	DNAJC21	DNM2	DNMT1
DNMT3A	DOCK8	DTX1	EED	EFTUD1	EGFR	ELANE	EP300	ERBB4	ETNK1
ETV6	EZH2	FAM47A	FAM5C	FAS	FAT1	FAT4	FBXO11	FBXW7	FLT3
FOXO1	FYN	GATA1	GATA2	GATA3	GNA13	GNAS	GNB1	GSKIP	HAX1
HIST1H1E	HNRNPK	HRAS	HVCN1	ID3	IDH1	IDH2	IGLL5	IKZF1	IKZF3
IL7R	IRF4	JAK1	JAK2	JAK3	KDM6A	KIT	KLF2	KLHL6	KMT2A
KMT2C	KMT2D	KRAS	LLGL2	LRRC4	LUC7L2	MAGT1	MAML1	MAP2K1	MECOM
MED12	MEF2B	MGA	MLH1	MPL	MSH2	MSH6	MYC	MYD88	NAF1
NBN	NF1	NFKBIE	NOTCH1	NOTCH2	NPAT	NPM1	NRAS	NT5C2	NXF1
PAX5	PCLO	PDGFRA	PHF6	PIGA	PIK3CD	PIM1	PLCG1	PLCG2	PMS2
POT1	PPM1D	PRDM1	PRKCB	PRPF40B	PRPF8	PRPS1	PSMB5	PTCH1	PTEN
PTPN11	RAD21	RB1	RBBP6	RELN	RHOA	RIT1	RPS15	RTEL1	RUNX1
RYR1	RYR2	SAMD9	SAMD9L	SAMHD1	SBDS	SETBP1	SETD2	SETDB1	SF1
SF3A1	SF3B1	SH2B3	SMARCA2	SMARCB1	SMC1A	SMC3	SOCS1	SPEN	SPI1
SRP72	SRSF2	STAG2	STAT3	STAT5B	STXBP2	SUZ12	SYK	SYNE1	TBL1XR1
TCF3	TCF4	TERC	TERT	TET2	TNFAIP3	TNFRSF14	TP53	TRAF3	U2AF1
U2AF2	UBR5	USH2A	VAV1	WAS	WHSC1	WT1	XPO1	ZBTB7A	ZRSR2

Genes	RefSeq ID	CCDS ID#	Coverage	Exons
ABL1	NM_005157	CCDS35166	Full Gene	1 to 11
AKT1	NM_005163	CCDS9994.1	All Coding	1 to 13
ANKRD26	NM_001256053.1	CCDS41499.1	Hot Spot	5'-UTR, 21, 24, 27, 31
ARID1A	NM_006015.4	CCDS285.1	Full Gene	1 to 20
ARID1B	NM_020732.3	CCDS55072.1	Full Gene	1 to 20
ASXL1	NM_015338.5	CCDS13201.1	Full Gene	1 to 12
ASXL2	NM_018263.4	None	Hot Spot	1, 8, 10, 11, 12
ATG2B	NM_018036	CCDS9944	All Coding	1 to 42
ATM	NM_000051.3	CCDS31669.1	All Coding	2 to 65
ATRX	NM_138270.2	CCDS14435.1	Full Gene	1 to 34
BCL2	NM_000633.2	CCDS11981.1	All Coding	2, 3
BCL6	NM_001706.4	CCDS3289.1	All Coding	3 to 10
BCOR	NM_001123385	CCDS48093.1	All Coding	2 to 14
BCORL1	NM_021946.4	CCDS14616.1	Full Gene	1 to 12
BIRC3	NM_001165.4	CCDS8315.1	All Coding	2 to 9
BIRC6	NM_016252	CCDS33175	All Coding	1 to 74
BLM	NM_000057.2	CCDS10363.1	All Coding	2 to 22
BRAF	NM_004333.4	CCDS5863.1	Full Gene	1 to 18
BRCA1	NM_007294.3	CCDS11453.1	Full Gene	1 to 23

BRCA2	NM_000059.3	CCDS9344.1	All Coding	2 to 27
BRCC3	NM_001242640.1	CCDS56610.1	Hot Spot	4, 6, 10
BRD4	NM_058243	CCDS12328	All Coding	2 to 20
BTK	NM_000061.2	CCDS14482.1	All Coding	2 to 19
CALR	NM_004343.3	CCDS12288.1	Full Gene	1 to 9
CARD11	NM_032415.4	CCDS5336.2	Hot Spot	3, 4, 5, 6, 7, 8, 9, 15, 21
CASP10	NM_032977	CCDS2340	All Coding	1 to 10
CBL	NM_005188.3	CCDS8418.1	Full Gene	1 to 16
CBLB	NM_170662.3	CCDS2948.1	Full Gene	1 to 20
CBLC	NM_012116.3	CCDS12643.1	Full Gene	1 to 10
CCND1	NM_053056.2	CCDS8191.1	Full Gene	1 to 5
CCND3	NM_001136126.1	CCDS47427.1	Full Gene	1 to 4
CCR4	NM_005508.4	CCDS2656.1	All Coding	2
CD27	NM_001242	CCDS8545	All Coding	1 to 6
CD79A	NM_001783	CCDS12589	All Coding	1 to 5
CD79B	NM_021602.2	CCDS11656.1	Full Gene	1 to 5
CDH11	NM_001797.2	CCDS10803.1	All Coding	3 to 13
CDKN2A	NM_000077	CCDS6510.1	<i>Full Gene</i>	<i>1 to 3</i>
CDKN2C	NM_001262.2	CCDS555.1	All Coding	2, 3
CEBPA	NM_004364.3	CCDS54243.1	Full Gene	1
CHD2	NM_001271	CCDS10374	All Coding	2 to 39
CHEK2	NM_007194	CCDS13843	All Coding	2 to 14
CREBBP	NM_004380.2	CCDS10509.1	Full Gene	1 to 31
CRLF2	NM_022148.2	None	Full Gene	1 to 6
CSF1R	NM_005211.3	CCDS4302.1	Hot Spot	2, 3, 4, 6, 7, 8, 9, 11, 15, 19, 20, 21, 22
CSF3R	NM_156039	CCDS414.1	All Coding	3 to 18
CTCF	NM_006565.3	CCDS10841.1	All Coding	3 to 12
CTLA4	NM_005214	CCDS2362	All Coding	1 to 4
CUX1	NM_181552	CCDS5721.1	Full Gene	1 to 23
CXCR4	NM_003467.2	CCDS46420.1	Full Gene	1 to 2
DAXX	NM_001254717.1	CCDS59008.1	Full Gene	1 to 7
DDX41	NM_016222	CCDS4427	All Coding	1 to 17
DDX54	NM_024072.3	CCDS31907.1	Hot Spot	7
DHX15	NM_001358	CCDS33966	All Coding	1 to 14
DHX29	NM_019030.2	CCDS34158.1	Hot Spot	11
DIS3	NM_014953.3	CCDS9447.1	Full Gene	1 to 21
DNAH5	NM_001369.2	CCDS3882.1	Hot Spot	11, 12, 25, 28, 31, 32, 43, 45, 48, 54, 56, 58, 66, 68, 69, 73, 77, 78
DNAH9	NM_001372.3	CCDS11160.1	Hot Spot	2, 7, 17, 19, 31, 32, 47, 50, 60, 61, 63, 64
DNAJC21	NM_001012339	CCDS34144	All Coding	1 to 13
DNM2	NM_001005360.2	CCDS45968.1	Hot Spot	2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 15, 17, 18, 19, 20
DNMT1	NM_001379.2	CCDS12228.1	Full Gene	1 to 40
DNMT3A	NM_175629.2	CCDS33157.1	All Coding	2 to 23
DOCK8	NM_203447.3	CCDS6440	All Coding	1 to 48

DTX1	NM_004416	CCDS9164	All Coding	1 to 9
EED	NM_003797	CCDS8273.1	Full Gene	1 to 13
EFTUD1	NM_024580	CCDS42071	All Coding	1 to 20
EGFR	NM_005228.3	CCDS5514.1	Full Gene	1 to 28
ELANE	NM_001972.2	CCDS12045.1	Full Gene	1 to 5
EP300	NM_001429.3	CCDS14010.1	Full Gene	1 to 31
ERBB4	NM_005235	CCDS2394.1	Full Gene	1 to 27
ETNK1	NM_018638.4	CCDS8698.1	Hot Spot	1, 3
ETV6	NM_001987.4	CCDS8643.1	Full Gene	1 to 8
EZH2	NM_004456	CCDS5891.1	Full Gene	1 to 20
FAM47A	NM_203408.3	CCDS43926.1	Full Gene	1
FAM5C	NM_199051.1	CCDS1373.1	All Coding	2 to 8
FAS	NM_000043.4	CCDS7393.1	Full Gene	1 to 9
FAT1	NM_005245.3	CCDS47177.1	All Coding	2 to 27
FAT4	NM_024582.4	CCDS3732.3	Full Gene	1 to 17
FBXO11	NM_001190274.1	CCDS54357.1	Full Gene	1 to 22
FBXW7	NM_033632.3	CCDS3777.1	Full Gene	1 to 12
FLT3	NM_004119.2	CCDS31953.1	Full Gene	1 to 24
FOXO1	NM_002015.3	CCDS9371.1	Full Gene	1 to 2
FYN	NM_002037.5	CCDS5094.1	Hot Spot	5, 7, 14
GATA1	NM_002049.3	CCDS14305.1	All Coding	2 to 6
GATA2	NM_032638.4	CCDS3049.1	All Coding	2 to 6, intron 4
GATA3	NM_002051.2	CCDS7083.1	All Coding	2 to 6
GNA13	NM_006572.4	CCDS11661.1	Full Gene	1 to 4
GNAS	NM_000516	CCDS 13472.1	Full Gene	1 to 13
GNB1	NM_002074.3	CCDS34.1	Hot Spot	5,6
GSKIP	NM_001271904	CCDS32153	All Coding	1 to 2
HAX1	NM_006118	CCDS1064	All Coding	1 to 7
HIST1H1E	NM_005321	CCDS4586	All Coding	1
HNRNPK	NM_031262.2	CCDS6667.1	All Coding	3 to 17
HRAS	NM_005343.2	CCDS7698.1	All Coding	2 to 5
HVCN1	NM_032369	CCDS31900	All Coding	3 to 8
ID3	NM_002167.4	CCDS237.1	Full Gene	1, 2
IDH1	NM_005896.2	CCDS2381.1	All Coding	3 to 10
IDH2	NM_002168.2	CCDS10359.1	Full Gene	1 to 11
IGLL5	NM_001178126.1	CCDS54506.1	Full Gene	1 to 3
IKZF1	NM_006060	CCDS59055.1	All Coding	2 to 7
IKZF3	NM_001257409.1	CCDS58539.1	Full Gene	1 to 6
IL7R	NM_002185.3	CCDS3911.1	Full Gene	1 to 8
IRF4	NM_002460	CCDS4469	All Coding	2 to 9
JAK1	NM_002227.2	CCDS41346.1	All Coding	2 to 25
JAK2	NM_004972.3	CCDS6457.1	All Coding	3 to 25
JAK3	NM_000215.3	CCDS12366.1	Full Gene	1 to 24
KDM6A	NM_021140.2	CCDS14265.1	Full Gene	1 to 29

KIT	NM_000222.2	CCDS3496.1	Full Gene	1 to 23
KLF2	NM_016270	CCDS12343	All Coding	1 to 3
KLHL6	NM_130446.2	CCDS3245.2	Hot Spot	1, 4, 7
KMT2A	NM_005933	CCDS55791.1	Full Gene	1 to 36
KMT2C	NM_170606.2	CCDS5931.1	Full Gene	1 to 59
KMT2D	NM_003482.3	CCDS44873.1	Full Gene	1 to 54
KRAS	NM_004985.3	CCDS8702.1	All Coding	2 to 5
LLGL2	NM_001031803.1	CCDS32733.1	Hot Spot	3, 15, 18, 20, 21
LRRC4	NM_022143.4	CCDS5799.1	Hot Spot	2
LUC7L2	NM_001244585.1	CCDS59085.1	Hot Spot	3, 4, 5, 8
MAGT1	NM_032121	CCDS14436	All Coding	1 to 10
MAML1	NM_014757	CCDS34315	All Coding	1 to 5
MAP2K1	NM_002755.3	CCDS10216.1	Full Gene	1 to 11
MECOM	NM_001205194.1	CCDS3205.1	Hot Spot	2, 4, 6, 7, 10, 12, 13, 14, 15, 16
MED12	NM_005120.2	CCDS43970.1	Full Gene	1 to 45
MEF2B	NM_001145785.1	CCDS46024.1	All Coding	2 to 9
MGA	NM_001164273	CCDS55959	All Coding	1 to 24
MLH1	NM_000249.3	CCDS2663.1	Full Gene	1 to 19
MPL	NM_005373.2	CCDS483.1	Full Gene	1 to 12
MSH2	NM_000251.2	CCDS1834.1	Full Gene	1 to 16
MSH6	NM_000179.2	CCDS1836.1	Full Gene	1 to 10
MYC	NM_002467.4	CCDS6359.2	Full Gene	1 to 3
MYD88	NM_002468	CCDS2674.2	Full Gene	1 to 5
NAF1	NM_138386	CCDS3803	All Coding	1 to 8
NBN	NM_002485.4	CCDS6249.1	Full Gene	1 to 16
NF1	NM_001042492.2	CCDS42292.1	Full Gene	1 to 58
NFKBIE	NM_004556.2	CCDS34463.1	Full Gene	1 to 3
NOTCH1	NM_017617.3	CCDS43905.1	Full Gene	1 to 34
NOTCH2	NM_024408.3	CCDS908.1	Full Gene	1 to 34
NPAT	NM_002519.2	CCDS41710.1	Hot Spot	13
NPM1	NM_002520.6	CCDS4376.1	Full Gene	1 to 11
NRAS	NM_002524.4	CCDS877.1	All Coding	2 to 5
NT5C2	NM_001134373.2	CCDS7544.1	Hot Spot	3, 10, 14, 16
NXF1	NM_006362.4	CCDS8037.1	Hot Spot	2, 3, 5, 6
PAX5	NM_016734.2	CCDS6607.1	Full Gene	1 to 10
PCLO	NM_033026.5	CCDS47630.1	Full Gene	1 to 25
PDGFRA	NM_006206.4	CCDS3495.1	All Coding	2 to 23
PHF6	NM_032458.2	CCDS14639.1	All Coding	2 to 10
PIGA	NM_020473.3	CCDS48086.2	Hot Spot	2
PIK3CD	NM_005026.3	CCDS104.1	Hot Spot	4, 5, 6, 9, 10, 11, 12, 13, 15, 17, 20, 21, 22, 23, 24
PIM1	NM_002648.3	CCDS4830.1	Full Gene	1 to 6
PLCG1	NM_002660.2	CCDS13313.1	Full Gene	1 to 32
PLCG2	NM_002661.3	CCDS42204.1	All Coding	2 to 33
PMS2	NM_000535.5	CCDS5343.1	Hot Spot	2, 11, 12, 15

POT1	NM_015450.2	CCDS5793.1	All Coding	5 to 19
PPM1D	NM_003620.3	CCDS11625.1	Hot Spot	5, 6
PRDM1	NM_001198.3	CCDS5054.2	Full Gene	1 to 7
PRKCB	NM_002738.6	CCDS10619.1	Full Gene	1 to 17
PRPF40B	NM_001031698.2	CCDS31796.2	Hot Spot	3, 21
PRPF8	NM_006445.3	CCDS11010.1	Hot Spot	7, 14, 33
PRPS1	NM_002764	CCDS14529	All Coding	1 to 4
PSMB5	NM_002797	CCDS9584	All Coding	1 to 4
PTCH1	NM_000264.3	CCDS6714	Full Gene	1 to 23
PTEN	NM_000314.4	CCDS31238.1	Full Gene	1 to 9
PTPN11	NM_002834.3	CCDS9163.1	Full Gene	1 to 15
RAD21	NM_006265.2	CCDS6321.1	All Coding	2 to 14
RB1	NM_000321.2	CCDS31973.1	Full Gene	1 to 27
RBBP6	NM_006910	CCDS10621	All Coding	1 to 18
RELN	NM_173054.2	CCDS34722.1	Hot Spot	7, 10, 12, 18, 22, 28, 30, 31, 33, 34, 41, 42, 44, 46, 54, 63, 64
RHOA	NM_001664.2	CCDS2795.1	All Coding	2 to 5
RIT1	NM_001256821	CCDS58037.1	Hot Spot	4
RPS15	NM_001018.4	CCDS12067	All Coding	1 to 4
RTEL1	NM_032957.4	CCDS13531	All Coding	2 to 35
RUNX1	NM_001754.4	CCDS13639.1	All Coding	2 to 9
RYR1	NM_000540.2	CCDS33011.1	Hot Spot	4, 12, 13, 18, 25, 33, 34, 40, 43, 44, 48, 51, 55, 85, 89, 90, 98, 101
RYR2	NM_001035.2	CCDS55691.1	Hot Spot	3, 13, 14, 17, 18, 21, 24, 27, 28, 29, 31, 32, 33, 34, 36, 37, 39, 41, 50, 51, 56, 62, 65, 68, 69, 72, 74, 77, 85, 87, 90, 91, 92, 94, 104
SAMD9	NM_017654	CCDS34680	All Coding	1
SAMD9L	NM_152703	CCDS34681	All Coding	1
SAMHD1	NM_015474	CCDS13288	All Coding	1 to 16
SBDS	NM_016038	CCDS5537	All Coding	1 to 5
SETBP1	NM_015559	CCDS11923	All Coding	2 to 4
SETD2	NM_014159.6	CCDS2749.2	Full Gene	1 to 21
SETDB1	NM_001145415	CCDS44217	All Coding	1 to 22
SF1	NM_201998.2	CCDS8081.1	Hot Spot	3, 4, 12
SF3A1	NM_001005409.1	CCDS46684.1	Hot Spot	3, 12
SF3B1	NM_012433.2	CCDS33356.1	Full Gene	1 to 25
SH2B3	NM_005475.2	CCDS9153.1	Full Gene	1 to 8
SMARCA2	NM_003070	CCDS34977	All Coding	1 to 33
SMARCB1	NM_003073.3	CCDS13817.1	Full Gene	1 to 9
SMC1A	NM_006306.3	CCDS14352.1	Full Gene	1 to 25
SMC3	NM_005445.3	CCDS31285.1	Full Gene	1 to 29
SOCS1	NM_003745.1	CCDS10546.1	All Coding	2
SPEN	NM_015001.2	CCDS164.1	Full Gene	1 to 15
SPI1	NM_003120	CCDS7933	All Coding	1 to 5
SRP72	NM_006947.3	CCDS3506.1	Hot Spot	14
SRSF2	NM_003016	CCDS11749.1	Full Gene	1 to 2

STAG2	NM_001042749.1	CCDS43990.1	All Coding	3 to 35
STAT3	NM_003150.3	CCDS32657.1	Full Gene	1 to 24
STAT5B	NM_012448.3	CCDS11423.1	Hot Spot	7, 8, 15, 16, 17
STXBP2	NM_006949.3	CCDS12181.1	Hot Spot	5
SUZ12	NM_015355.2	CCDS11270.1	Full Gene	1 to 16
SYK	NM_003177.5	CCDS6688.1	All Coding	2 to 14
SYNE1	NM_182961.3	CCDS5236.2	Hot Spot	3, 5, 12, 19, 26, 27, 28, 31, 37, 41, 42, 44, 48, 52, 53, 54, 56, 58, 60, 65, 73, 74, 77, 78, 81, 83, 85, 87, 88, 92, 94, 95, 99, 100, 103, 104, 112, 117, 120, 121, 125, 128, 133, 137, 138, 139, 140, 141, 146
TBL1XR1	NM_024665.4	CCDS46961.1	Hot Spot	3, 5, 6, 7, 9, 10, 11, 12, 13, 14
TCF3	NM_003200.3	CCDS12074.1	All Coding	2 to 19
TCF4	NM_001243226.1	CCDS58631.1	Hot Spot	11, 14, 19, 20
TERC	NR_001566	ENSG00000270141	All Coding	1
TERT	NM_198253.2	CCDS3861	All Coding	1 to 16
TET2	NM_001127208.2	CCDS47120.1	All Coding	3 to 11
TNFAIP3	NM_006290	CCDS5187.1	All Coding	2 to 9
TNFRSF14	NM_003820.2	CCDS44046.1	Full Gene	1 to 8
TP53	NM_000546	CCDS11118.1	All Coding	2 to 11
TRAF3	NM_003300	CCDS9975	All Coding	2 to 11
U2AF1	NM_006758.2	CCDS13694.1	Full Gene	1 to 8
U2AF2	NM_007279.2	CCDS12933.1	Hot Spot	5, 6, 11
UBR5	NM_015902.5	CCDS34933.1	Hot Spot	58
USH2A	NM_206933.2	CCDS31025.1	Hot Spot	2, 5, 7, 8, 13, 15, 17, 18, 19, 20, 21, 22, 23, 25, 27, 30, 32, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 50, 52, 54, 55, 57, 60, 62, 63, 64, 68, 71, 72
VAV1	NM_005428.3	CCDS12174.1	Hot Spot	1, 2, 5, 13, 15, 16, 17, 22, 26, 27
WAS	NM_000377.2	CCDS14303	All Coding	1 to 12
WHSC1	NM_001042424.2	CCDS33940.1	Hot Spot	5, 9, 13, 15, 18, 19, 20
WT1	NM_024424	CCDS7878.2	Full Gene	1 to 9
XPO1	NM_003400.3	CCDS33205.1	Hot Spot	15, 16, 18
ZBTB7A	NM_015898	CCDS12119	All Coding	2 to 33
ZRSR2	NM_005089.3	CCDS14172.1	Full Gene	1 to 11