

Targeted Fusion*	5' Gene	Transcript	Exons	3' Gene	Transcript	Exons
ATF7IP-JAK2	ATF7IP	NM_181352	13	JAK2	NM_001322194	9,11,13,15,17,18,19
BCR-ABL1	BCR	NM_004327	1,4,6,7,12,13,14,19	ABL1	NM_007313	2,3,4
BCR-JAK2	BCR	NM_004327	1,4,6,7,12,13,14,19	JAK2	NM_001322194	9,11,13,15,17,18,19
BCR-PDGFR	BCR	NM_004327	1,4,6,7,12,13,14,19	PDGFR	NM_006206	12
BCR-FGFR1	BCR	NM_004327	1,4,6,7,12,13,14,19	FGFR1	NM_001174064	10
BMP2K-ZNF384	BMP2K	NM_198892	14,15	ZNF384	NM_001135734	3,4,7
CBFA2T3-GLIS2	CBFA2T3	NM_005187	10,11	GLIS2	NM_001318918	2,3
CBFB-MYH11	CBFB	NM_001755	4,5	MYH11	NM_001040113	29,30,31,32,33,34,35
CCDC6-PDGFRB	CCDC6	NM_005436	1,7	PDGFRB	NM_002609	9,11
CHIC2-ETV6	CHIC2	NM_012110	3	ETV6	NM_001987	2,3
CNTRL-FGFR1	CNTRL	NM_007018	40	FGFR1	NM_001174064	10
CREBBP-ZNF384	CREBBP	NM_004380	4,5,6,7	ZNF384	NM_001135734	3,4,7
CUX1-FGFR1	CUX1	NM_001202543	11	FGFR1	NM_001174064	10
DEK-NUP214	DEK	NM_003472	9	NUP214	NM_005085	17,18
EBF1-JAK2	EBF1	NM_001324111	10,13,14,15	JAK2	NM_001322194	9,11,13,15,17,18,19
EBF1-PDGFRB	EBF1	NM_001324111	10,13,14,15	PDGFRB	NM_002609	9,11
EML1-ABL1	EML1	NM_001008707	17	ABL1	NM_007313	2,3,4
EP300-ZNF384	EP300	NM_001429	6	ZNF384	NM_001135734	3,4,7
ETV6-ABL1	ETV6	NM_001987	4,5,6,7	ABL1	NM_007313	2,3,4
ETV6-PDGFRB	ETV6	NM_001987	4,5,6,7	PDGFRB	NM_002609	9,11
ETV6-NTRK3	ETV6	NM_001987	4,5,6,7	NTRK3	NM_001012338	14,15
ETV6-JAK2	ETV6	NM_001987	4,5,6,7	JAK2	NM_001322194	9,11,13,15,17,18,19
ETV6-RUNX1	ETV6	NM_001987	4,5,6,7	RUNX1	NM_001754	3,4
ETV6-ARNT	ETV6	NM_001987	4,5,6,7	ARNT	NM_001286035	2
FGFR1OP-FGFR1	FGFR1OP	NM_007045	5,6,10	FGFR1	NM_001174064	10
FIP1L1-PDGFR	FIP1L1	NM_030917	12	PDGFR	NM_006206	12
FOXP1-ABL1	FOXP1	NM_001244808	19	ABL1	NM_007313	2,3,4
INPP5D-ABL1	INPP5D	NM_001017915	9	ABL1	NM_007313	2,3,4
KAT6A-CREBBP	KAT6A	NM_006766	16	CREBBP	NM_004380	2,3
KMT2A-CREBBP	KMT2A	NM_001197104	8,9,10,11	CREBBP	NM_004380	2,3
KMT2A-RARA	KMT2A	NM_001197104	8,9,10,11	RARA	NM_001024809	3
KMT2A-AFF1	KMT2A	NM_001197104	8,9,10,11	AFF1	NM_001313959	4,5,6,11
KMT2A-KMT2A (MLL-PTD)	KMT2A	NM_001197104	8,9,10,11	KMT2A	NM_001197104	2
KMT2A-MLLT3	KMT2A	NM_001197104	8,9,10,11	MLLT3	NM_004529	4,5,6,9,10
KMT2A-MLLT1	KMT2A	NM_001197104	8,9,10,11	MLLT1	NM_005934	2,4,5,6,7
KMT2A-MLLT10	KMT2A	NM_001197104	8,9,10,11	MLLT10	NM_001324297	4,6,9,10,16
KMT2A-AFDN	KMT2A	NM_001197104	8,9,10,11	AFDN	NM_001291964	2
KMT2A-ELL	KMT2A	NM_001197104	8,9,10,11	ELL	NM_006532	2,3,6
KMT2A-EPS15	KMT2A	NM_001197104	8,9,10,11	EPS15	NM_001981	2,6
KMT2A-MLLT6	KMT2A	NM_001197104	8,9,10,11	MLLT6	NM_005937	8,9,10
KMT2A-SEPT6	KMT2A	NM_001197104	8,9,10,11	SEPT6	NM_145799	2
KMT2A-MLLT11	KMT2A	NM_001197104	8,9,10,11	MLLT11	NM_006818	2
KMT2A-CIP2A	KMT2A	NM_001197104	8,9,10,11	CIP2A	NM_020890	17
KMT2A-AFF4	KMT2A	NM_001197104	8,9,10,11	AFF4	NM_014423	4,5,6
KMT2A-ARHGAP26	KMT2A	NM_001197104	8,9,10,11	ARHGAP26	NM_015071	19
KMT2A-MAPRE1	KMT2A	NM_001197104	8,9,10,11	MAPRE1	NM_012325	2,4,6
KMT2A-SEPT5	KMT2A	NM_001197104	8,9,10,11	SEPT5	NM_001009939	3
KMT2A-SEPT9	KMT2A	NM_001197104	8,9,10,11	SEPT9	NM_001113492	2,3
KMT2A-TET1	KMT2A	NM_001197104	8,9,10,11	TET1	NM_030625	9
KMT2A-AFF3	KMT2A	NM_001197104	8,9,10,11	AFF3	NM_002285	5,6,10
KMT2A-KNL1	KMT2A	NM_001197104	8,9,10,11	KNL1	NM_170589	12
KMT2A-FOXO3	KMT2A	NM_001197104	8,9,10,11	FOXO3	NM_001455	3
KMT2A-MAML2	KMT2A	NM_001197104	8,9,10,11	MAML2	NM_032427	2,3
KMT2A-NRIP3	KMT2A	NM_001197104	8,9,10,11	NRIP3	NM_020645	2
KMT2A-ARHGEF17	KMT2A	NM_001197104	8,9,10,11	ARHGEF17	NM_014786	2,3,4,5
KMT2A-C2CD3	KMT2A	NM_001197104	8,9,10,11	C2CD3	NM_001286577	13,14,15,17
KMT2A-ARHGEF12	KMT2A	NM_001197104	8,9,10,11	ARHGEF12	NM_015313	11,12,13
KMT2A-CBL	KMT2A	NM_001197104	8,9,10,11	CBL	NM_005188	10
KMT2A-DCPS	KMT2A	NM_001197104	8,9,10,11	DCPS	NM_014026	2
MEF2D-CSF1R	MEF2D	NM_005920	7	CSF1R	NM_005211	12
MN1-ETV6	MN1	NM_002430	1	ETV6	NM_001987	2,3
MNX1-ETV6	MNX1	NM_005515	1	ETV6	NM_001987	2,3
MYB-GATA1	MYB	NM_001130173	8	GATA1	NM_002049	5
NCOR1-LYN	NCOR1	NM_006311	34	LYN	NM_002350	7
NDE1-PDGFRB	NDE1	NM_001143979	6	PDGFRB	NM_002609	9,11
NPM1-RARA	NPM1	NM_002520	4,6	RARA	NM_001024809	3

NPM1-MLF1	NPM1	NM_002520	4,6	MLF1	NM_001195432	2
NUP214-ABL1	NUP214	NM_005085	23,26,28,29,30,31,32,34	ABL1	NM_007313	2,3,4
NUP98-NSD1	NUP98	NM_016320	10,11,12,13,14	NSD1	NM_022455	6
NUP98-HOXA9	NUP98	NM_016320	10,11,12,13,14	HOXA9	NM_152739	1,2
NUP98-TOP1	NUP98	NM_016320	10,11,12,13,14	TOP1	NM_003286	8
NUP98-DDX10	NUP98	NM_016320	10,11,12,13,14	DDX10	NM_004398	6,7
NUP98-RAP1GDS1	NUP98	NM_016320	10,11,12,13,14	RAP1GDS1	NM_001100426	2,3
NUP98-KDM5A	NUP98	NM_016320	10,11,12,13,14	KDM5A	NM_001042603	27
OFD1-JAK2	OFD1	NM_003611	22	JAK2	NM_001322194	9,11,13,15,17,18,19
P2RY8-CRLF2	P2RY8	NM_178129	1	CRLF2	NR_110830	1
PAG1-ABL2	PAG1	NM_018440	8	ABL2	NM_007314	3,5
PAX5-ETV6	PAX5	NM_016734	4,5	ETV6	NM_001987	2,3
PAX5-JAK2	PAX5	NM_016734	4,5	JAK2	NM_001322194	9,11,13,15,17,18,19
PCM1-JAK2	PCM1	NM_006197	26,36	JAK2	NM_001322194	9,11,13,15,17,18,19
PDE4DIP-PDGFRB	PDE4DIP	NM_014644	19	PDGFRB	NM_002609	9,11
PICALM-MLLT10	PICALM	NM_007166	16,18,19	MLLT10	NM_001324297	4,6,9,10,16
PML-RARA	PML	NM_033238	3,6	RARA	NM_001024809	3
RANBP2-ABL1	RANBP2	NM_006267	18	ABL1	NM_007313	2,3,4
RBM15-MKL1	RBM15	NM_022768	2	MKL1	NM_001282662	4,5
RCSD1-ABL1	RCSD1	NM_052862	2,3	ABL1	NM_007313	2,3,4
RUNX1-RUNX1T1	RUNX1	NM_001001890	3	RUNX1T1	NM_001198625	6
SET-NUP214	SET	NM_003011	7	NUP214	NM_005085	17,18
SFPQ-ABL1	SFPQ	NM_005066	9	ABL1	NM_007313	2,3,4
SNX2-ABL1	SNX2	NM_001278199	3	ABL1	NM_007313	2,3,4
SPAG9-JAK2	SPAG9	NM_001130528	26	JAK2	NM_001322194	9,11,13,15,17,18,19
SPTBN1-FLT3	SPTBN1	NM_003128	3	FLT3	NR_130706	14
SPTBN1-PDGFRB	SPTBN1	NM_003128	3	PDGFRB	NM_002609	9,11
SSBP2-JAK2	SSBP2	NM_001256732	5,6,8,10,16	JAK2	NM_001322194	9,11,13,15,17,18,19
SSBP2-CSF1R	SSBP2	NM_001256732	5,6,8,10,16	CSF1R	NM_005211	12
STAT5B-RARA	STAT5B	NM_012448	15,16	RARA	NM_001024809	3
STIL-TAL1	STIL	NM_001282936	1	TAL1	NM_003189	3,4,5
STRN-PDGFRB	STRN	NM_003162	6	PDGFRB	NM_006206	12
STRN3-JAK2	STRN3	NM_001083893	8,9	JAK2	NM_001322194	9,11,13,15,17,18,19
TAF15-ZNF384	TAF15	NM_139215	6,8	ZNF384	NM_001135734	3,4,7
TCF3-PBX1	TCF3	NM_003200	11,13,14,17	PBX1	NM_002585	2
TCF3-HLF	TCF3	NM_003200	11,13,14,17	HLF	NM_002126	4
TERF2-JAK2	TERF2	NM_005652	8	JAK2	NM_001322194	9,11,13,15,17,18,19
TPM3-PDGFRB	TPM3	NM_152263	8	PDGFRB	NM_002609	9,11
TPR-FGFR1	TPR	NM_003292	22,39	FGFR1	NM_001174064	10
TRIM24-FGFR1	TRIM24	NM_015905	9,10,11	FGFR1	NM_001174064	10
ZBTB16-RARA	ZBTB16	NM_006006	3,4	RARA	NM_001024809	3
ZBTB16-ABL1	ZBTB16	NM_006006	3,4	ABL1	NM_007313	2,3,4
ZC3HAV1-ABL2	ZC3HAV1	NM_020119	12	ABL2	NM_007314	3,5
ZEB2-PDGFRB	ZEB2	NM_014795	10	PDGFRB	NM_002609	9,11
ZMIZ1-ABL1	ZMIZ1	NM_020338	18	ABL1	NM_007313	2,3,4
ZMYM2-FGFR1	ZMYM2	NM_003453	16	FGFR1	NM_001174064	10

* Fusions resulting from an unintended combination of genes/exons may also be detected