

**Supplementary Table 4. Non read-through fusions with canonical exonic boundaries called by INTEGRATE from 62 TCGA breast cancer patients.**

Note: UCSC genes and alignments by TopHat2 and BWA are used as input. Coordinates are based on Genome Reference Consortium Human Build 37 (GRCh37).

5P	3P	Tier	Type	Num_Samples	Samples	Chr1	Chr2	Junc1	Junc2	breakp1	breakp2	
KANSL1	ARL17A	1	Intra_Chromosomal	7	TCGA-A1-A05M;TCGA-A8-A08S;TCGA-AN-A04D;TC	17	17	44171926		44430296	44165257	44433875
DCAF6	MPZL1	1	Intra_Chromosomal	2	TCGA-A2-A0YG;TCGA-A7-A26G	1	1	167906246		167734820	167908290	167729428
ESR1	CCDC170	1	Intra_Chromosomal	2	TCGA-A2-A0YG;TCGA-BH-A18R	6	6	152023140		151857453	152073370	151852051
RPS15A	ARL6IP1	1	Intra_Chromosomal	2	TCGA-A2-A0D2;TCGA-C8-A12L	16	16	18796060		18810156	18795695	18810594
TANGO6	CDH1	1	Intra_Chromosomal	2	TCGA-A7-A13D;TCGA-A8-A08L	16	16	68901123		68855904	68908101	68854753
STAT3	PTRF	1	Intra_Chromosomal	2	TCGA-A2-A0D2;TCGA-EW-A1PB	17	17	40540297		40557406	40533068	40613832
GUK1	TPPP	1	Inter_Chromosomal	1	TCGA-EW-A1PB	1	5	22833325		678179	228333581	680013
WASH7P	DGAT2	1	Inter_Chromosomal	1	TCGA-A7-A0CE	1	11	29321		75495663	27943	75476788
HOOK1	RAB6A	1	Inter_Chromosomal	1	TCGA-AR-A24Z	1	11	60280852		73390765	60282246	73470720
ZCCHC17	LOC284395	1	Inter_Chromosomal	1	TCGA-A2-A0CM	1	19	31792013		29919717	31805232	30049916
EFNA4	C20orf96	1	Inter_Chromosomal	1	TCGA-E2-A109	1	20	155039916		264722	155055789	268746
SGPP2	ALG14	1	Inter_Chromosomal	2	TCGA-B6-A0RE	2	1	22338975		95492816	223395103	95510790
AP2M1	PHF2	1	Inter_Chromosomal	1	TCGA-D8-A27H	3	9	183896910		96392252	183898694	96384052
ZNF17	TMEM254	1	Inter_Chromosomal	1	TCGA-C8-A12Q	3	10	75832457		81841597	75815734	81823524
FRYL	CR936796	1	Inter_Chromosomal	1	TCGA-C8-A12Q	4	1	48522541		143119061	48520753	142619890
NUP155	ZFYVE26	1	Inter_Chromosomal	1	TCGA-E2-A15K	5	14	37370923		68244965	37368881	68245519
DAP	SNX9	1	Inter_Chromosomal	1	TCGA-A8-A09X	6	5	158323077		10683683	158324851	10731286
GOPC	ABLIM1	1	Inter_Chromosomal	1	TCGA-BH-A18R	6	10	117900063		116251637	117896112	116258086
QKI	ZNF214	1	Inter_Chromosomal	1	TCGA-A2-A0CM	6	11	163836367		7024086	163862690	7085681
RPS6KA2	AK309717	1	Inter_Chromosomal	1	TCGA-D8-A27F	6	18	166944720		37442213	166924845	37444607
IKZF1	LRBA	1	Inter_Chromosomal	1	TCGA-D8-A27H	7	4	50367353		151207186	50442005	151217804
IGF2BP3	ACSM1	1	Inter_Chromosomal	1	TCGA-A0-A124	7	16	23390924		20682993	23387831	20688388
METTL2B	CA10	1	Inter_Chromosomal	1	TCGA-A8-A09I	7	17	128119567		49731097	128127245	49760437
ANKRD46	TMEM222	1	Inter_Chromosomal	1	TCGA-AN-A04D	8	1	101571939		27657211	101560583	27649572
CA13	RBKS	1	Inter_Chromosomal	1	TCGA-BH-A0AV	8	2	86180856		28055644	86192556	28057990
TRPS1	TBC1D9B	1	Inter_Chromosomal	1	TCGA-A2-A0EY	8	5	116599228		179321614	116527056	179322696
ZNF462	DNAJC1	1	Inter_Chromosomal	1	TCGA-A2-A04T	9	10	109625636		22095028	109661469	22110541
CNTLN	ADCK4	1	Inter_Chromosomal	1	TCGA-A2-A04T	9	19	17143374		41220540	17183487	41226368
CCNY	DENDN1A	1	Inter_Chromosomal	1	TCGA-AR-A256	10	9	35626135		126520101	35658698	126520748
SLC35F2	C6orf185	1	Inter_Chromosomal	1	TCGA-BH-A18R	11	6	107729384		109665190	107724946	109664606
ST14	ST7	1	Inter_Chromosomal	1	TCGA-AR-A256	11	7	130029955		116739816	130051210	116587049
RNF121	CYSLTR2	1	Inter_Chromosomal	1	TCGA-A7-A0CE	11	13	71671937		49280954	71689029	49275994
KDM2A	EV12A	1	Inter_Chromosomal	1	TCGA-BH-A18R	11	17	66888829		29646041	66900776	29684866
LOC10013098	IKZF3	1	Inter_Chromosomal	1	TCGA-C8-A12Q	11	17	67088804		37988404	67114420	38005855
NUMA1	AATF	1	Inter_Chromosomal	1	TCGA-A8-A08S	11	17	71780888		35343916	71775234	35318627
RNF169	CBX1	1	Inter_Chromosomal	1	TCGA-C8-A12Q	11	17	74528759		46154403	74533548	46154989
RSF1	PHF12	1	Inter_Chromosomal	1	TCGA-A1-A0SM	11	17	77531574		27254081	77503528	27260741
GAB2	PLXDC1	1	Inter_Chromosomal	1	TCGA-A1-A0SM	11	17	78128692		37296085	78076534	37314867
RAB38	CA10	1	Inter_Chromosomal	1	TCGA-C8-A12Q	11	17	87908351		50149753	87897986	50284126
RAB18	ARFGEF2	1	Inter_Chromosomal	1	TCGA-BH-A0H6	11	20	66043406		47567860	66043996	47562409
CD9	LOC10050564	1	Inter_Chromosomal	1	TCGA-B6-A0RE	12	1	6309731		155021837	6333986	155030305
ETV6	YTHDF2	1	Inter_Chromosomal	1	TCGA-EW-A1PB	12	1	11992238		29095441	12000811	29073621
LOC1002887	DGAT2	1	Inter_Chromosomal	1	TCGA-A7-A0CE	12	11	74365		75495663	75737	75476788
IPO8	CDH13	1	Inter_Chromosomal	1	TCGA-A2-A04P	12	16	30809618		83214475	30809206	83199679
USP15	CDH4	1	Inter_Chromosomal	1	TCGA-AR-A0TX	12	20	62749256		60318619	62759236	60265586
SCAMP2	SLC12A8	1	Inter_Chromosomal	1	TCGA-D8-A27H	15	3	75165540		124811042	75161982	124823884
CES2	GPATCH2	1	Inter_Chromosomal	1	TCGA-E2-A109	16	1	66972144		217622679	66972913	217655977
CRISPLD2	AGBL3	1	Inter_Chromosomal	1	TCGA-A0-A0J4	16	7	84922969		134717595	84936389	134715246
TA1F5	MAN1A2	1	Inter_Chromosomal	1	TCGA-C8-A12L	17	1	34169463		118035769	34170239	118023362
RARA	ZNF595/ZNF7	1	Inter_Chromosomal	1	TCGA-AR-A0TX	17	4	38487648		59323	38499108	41613
RHOT1	FGFR1	1	Inter_Chromosomal	1	TCGA-BH-A18U	17	8	30469748		38315052	30472939	38354986
PLEKHM1P	CSMD1	1	Inter_Chromosomal	1	TCGA-BH-A0DG	17	8	62817885		2857653	62817690	2867709
TAOK1	ACER3	1	Inter_Chromosomal	1	TCGA-A1-A0SM	17	11	27825539		76687333	27826088	76686396
LOC404034	RSF1	1	Inter_Chromosomal	1	TCGA-A1-A0SM	17	11	36398218		77378536	36391100	77381043
FBXL20	GDPD5	1	Inter_Chromosomal	1	TCGA-A1-A0SM	17	11	37457254		75167861	37455722	75168286
NPEPPS	RSF1	1	Inter_Chromosomal	1	TCGA-A1-A0SM	17	11	45623359		77378536	45630163	77381046
BCAS3	SHANK2	1	Inter_Chromosomal	1	TCGA-BH-A18R	17	11	58824640		70349036	58840546	70423793
ARL17A	NLRP1	1	Inter_Chromosomal	1	TCGA-AN-A04D	17	19	44435616		56329602	44430490	56351363
CENPV	FERMT1	1	Inter_Chromosomal	1	TCGA-E2-A109	17	20	16247911		6096691	16246525	6097257
LINC00669	CGGBP1	1	Inter_Chromosomal	1	TCGA-A2-A0D1	18	3	37380033		88107373	37348601	88107521
GRAMD1A	CCDC88A	1	Inter_Chromosomal	1	TCGA-A0-A0J4	19	2	35491390		55616022	35493335	55624099
EPS15L1	CLNS1A	1	Inter_Chromosomal	1	TCGA-C8-A12Q	19	11	16552703		77330740	16551877	77331786
ZNF345	TRIM21	1	Inter_Chromosomal	1	TCGA-EW-A1PB	19	11	37383887		4411688	37387686	4445899
ABR	STAP2	1	Inter_Chromosomal	1	TCGA-EW-A1PB	19	17	4333691		1028702	4332297	1039566

ARFGF2	CNIH2	1	Inter_Chromosomal	1	TCGA-BH-A0H6	20	11	47558524	66049730	47562404	66044015
LAMA5	UBN1	1	Inter_Chromosomal	1	TCGA-D8-A27F	16	20	4918834	60937456	4917998	60948578
DYRK1A	ZBTB46	1	Inter_Chromosomal	1	TCGA-C8-A130	21	20	38845182	62422143	38848010	62429309
ARHGAP8/PR	LINC00673	1	Inter_Chromosomal	1	TCGA-AO-A0JM	22	17	45182486	70424439	45195753	70537914
PACSIN2	ZNF823	1	Inter_Chromosomal	1	TCGA-AR-A24Z	22	19	43308027	11836142	43292218	11845093
SKI	KCNT2	1	Intra_Chromosomal	1	TCGA-D8-A27F	1	1	2161174	196461471	2194995	196462419
ICMT	ACOT7	1	Intra_Chromosomal	1	TCGA-A7-A26G	1	1	6294946	6378638	6294476	6379613
ARID1A	DHDDS	1	Intra_Chromosomal	1	TCGA-A7-A13D	1	1	27059283	26764659	27074167	26760066
BAI2	SPOCD1	1	Intra_Chromosomal	1	TCGA-BH-A0AV	1	1	32221600	32259836	32214695	32263727
LOC728431	SF3A3	1	Intra_Chromosomal	1	TCGA-C8-A12Q	1	1	37939745	38444499	37926281	38444613
TESK2	GPR37L1	1	Intra_Chromosomal	1	TCGA-AO-A124	1	1	45923236	202096869	45915294	202063446
MTF2	RPL5	1	Intra_Chromosomal	1	TCGA-A7-A13D	1	1	93581175	93306108	93581453	93305406
GNAI3	SARS	1	Intra_Chromosomal	1	TCGA-E2-A14P	1	1	110091460	109766600	110098506	109763858
GNAI3	CTTNBP2NL	1	Intra_Chromosomal	1	TCGA-BH-A0H0	1	1	110121983	112954816	110122283	112913729
PHTF1	SLC16A1	1	Intra_Chromosomal	1	TCGA-A8-A085	1	1	114281352	113471974	114281131	113501072
TRIM33	CSDE1	1	Intra_Chromosomal	1	TCGA-BH-A0H0	1	1	114970370	115280693	114970249	115282394
RRP2D	SHC1	1	Intra_Chromosomal	1	TCGA-C8-A12Q	1	1	150337395	154938993	150341776	154939550
GOLPH3L	CHRM3	1	Intra_Chromosomal	1	TCGA-EW-A1P8	1	1	150634290	239656009	150630473	239560041
DAP3	ATF3	1	Intra_Chromosomal	1	TCGA-A8-A08L	1	1	155659034	212788360	155690010	212777923
ARHGFE2	SSR2	1	Intra_Chromosomal	1	TCGA-AR-A256	1	1	155932724	155981678	155932484	155982506
SLC25A44	PMF1/PMF1-	1	Intra_Chromosomal	1	TCGA-AN-A0AT	1	1	156177804	156203419	156178121	156194585
USP21	PVRL4	1	Intra_Chromosomal	1	TCGA-A2-A25B	1	1	161134040	161042675	161134367	161042705
NOS1AP	MROH9	1	Intra_Chromosomal	1	TCGA-A2-A0YG	1	1	162302915	170983258	162306756	170973373
UCK2	SNX27	1	Intra_Chromosomal	1	TCGA-A2-A0YG	1	1	165797169	151611364	165807007	151607135
UCK2	DHX9	1	Intra_Chromosomal	1	TCGA-BH-A0BW	1	1	165875206	182850399	165875746	182849915
HMCN1	RNF2	1	Intra_Chromosomal	1	TCGA-AR-A256	1	1	185704179	185060711	185814401	185058442
PPP1R12B	CAMSAP2	1	Intra_Chromosomal	1	TCGA-AN-A0AT	1	1	202418299	200821669	202432142	200820284
ESRRG	ADCY10	1	Intra_Chromosomal	1	TCGA-C8-A12L	1	1	217112924	167794093	216881936	167801759
TARBP1	ARID4B/RBM	1	Intra_Chromosomal	1	TCGA-D8-A27H	1	1	234582549	235295312	234576594	235298952
ACTN2	CHRM3	1	Intra_Chromosomal	1	TCGA-AN-A0G0	1	1	236850099	239795524	236862149	239784137
TFB2M	SMYD3	1	Intra_Chromosomal	1	TCGA-A2-A0D2	1	1	246727648	246498776	246713594	246547217
WDR35	PUM2	1	Intra_Chromosomal	1	TCGA-A7-A13D	2	2	20130157	20483247	20127847	20484710
MSH2	TTC7A	1	Intra_Chromosomal	1	TCGA-A7-A26G	2	2	47641557	47233061	47643201	47224792
TIA1	TGFA	1	Intra_Chromosomal	1	TCGA-AR-A256	2	2	70475537	70692865	70469595	70730989
NCK2	SFXN5	1	Intra_Chromosomal	1	TCGA-A8-A09I	2	2	106471745	73195662	106492208	73205234
DIS3L2	UBE2E3	1	Intra_Chromosomal	1	TCGA-BH-A18U	2	2	233164829	181848770	233193565	181848494
EFDH1	EIF4E2	1	Intra_Chromosomal	1	TCGA-C8-A12Q	2	2	233537153	233431539	233537706	233430896
GIFYF2	CHRN2	1	Intra_Chromosomal	1	TCGA-AR-A256	2	2	233613792	233398641	233620957	233398127
ILKAP	PER2	1	Intra_Chromosomal	1	TCGA-A7-A26G	2	2	239090706	239157853	239089967	239159177
SACM1L	LIMD1	1	Intra_Chromosomal	1	TCGA-AN-A0AT	3	3	45730989	45707142	45731513	45678420
ARIH2	DHX30	1	Intra_Chromosomal	1	TCGA-A7-A13D	3	3	49011249	47887190	49012191	47885635
RAD54L2	ERC2	1	Intra_Chromosomal	1	TCGA-BH-A18U	3	3	51575666	55545304	51579916	55546673
RFT1	DCP1A	1	Intra_Chromosomal	1	TCGA-A7-A13D	3	3	53137969	53353500	53134445	53356034
UBA3	FRMD4B	1	Intra_Chromosomal	1	TCGA-BH-A0WA	3	3	69120686	69225807	69116212	69226795
RYBP	TADA3	1	Intra_Chromosomal	1	TCGA-C8-A12L	3	3	72495647	9833177	72458389	9850189
ALCAM	EIF2A	1	Intra_Chromosomal	1	TCGA-C8-A12L	3	3	105086325	150270143	105089098	150250555
RNF13	TM4SF4	1	Intra_Chromosomal	1	TCGA-A7-A26G	3	3	149531140	149216509	149549120	149210329
ARHGFE26	LINC00880	1	Intra_Chromosomal	1	TCGA-BH-A0WA	3	3	153847508	156801064	156811083	153856135
TBL1XR1	PIK3CA	1	Intra_Chromosomal	1	TCGA-E2-A14P	3	3	176914909	178916538	176909983	178906032
AKO56252	AF279780/AY	1	Intra_Chromosomal	1	TCGA-A2-A04P	3	3	177534784	178467024	178524721	177541106
USP13	PIK3CA	1	Intra_Chromosomal	1	TCGA-E2-A14P	3	3	179418917	178941869	179419529	178941796
FXR1	VGLL4	1	Intra_Chromosomal	1	TCGA-A2-A0CM	3	3	180630524	11606493	180644976	11719040
FAM131A	NAA50	1	Intra_Chromosomal	1	TCGA-AO-A0JM	3	3	184060648	113442942	184061957	113464380
LRCH3	FYTD1	1	Intra_Chromosomal	1	TCGA-A2-A04P	3	3	197518411	197508862	197520227	197506021
AFAP1	ABLIM2	1	Intra_Chromosomal	1	TCGA-A2-A0D2	4	4	7776466	7994654	7775278	8003731
NOA1	SPINK2	1	Intra_Chromosomal	1	TCGA-BH-A18U	4	4	57839314	57686745	57836626	57723476
KIAA1109	GPR125	1	Intra_Chromosomal	1	TCGA-C8-A12L	4	4	123260563	22394313	123261411	22395416
LPACAT1	CLPTM1L	1	Intra_Chromosomal	1	TCGA-A7-A0CE	5	5	1523825	1331998	1504985	1333908
SRD5A1	PAPD7	1	Intra_Chromosomal	1	TCGA-A2-A0CM	5	5	6633982	6738796	6638938	6737884
LIFR	C9	1	Intra_Chromosomal	1	TCGA-A7-A26G	5	5	38493708	39316131	38490996	39323041
DEPDC1B	PDE4D	1	Intra_Chromosomal	1	TCGA-AO-A124	5	5	59982789	59481514	59975946	59780416
NSA2	HEXB	1	Intra_Chromosomal	1	TCGA-BH-A0AV	5	5	74066635	74009331	74069495	74004907
LNPEP	CAST	1	Intra_Chromosomal	1	TCGA-A2-A0D2	5	5	96271878	96011243	96308819	95994755
PGGT1B	KIAA0825	1	Intra_Chromosomal	1	TCGA-AR-A256	5	5	114588834	93489829	114583835	93618318
DDR1	MRP518B	1	Intra_Chromosomal	1	TCGA-A8-A092	6	6	30859965	30587270	30860126	30585470
DDX39B	PRPH2	1	Intra_Chromosomal	1	TCGA-AR-A1AY	6	6	31506540	42672349	31505172	42673282
ATP6V1G2-D	PRPH2	1	Intra_Chromosomal	1	TCGA-AR-A1AY	6	6	31506540	42672349	31505172	42673282
KCTD20	JARID2	1	Intra_Chromosomal	1	TCGA-D8-A27H	6	6	36438034	15374348	36439196	15270904
ZFAND3	KCTD20	1	Intra_Chromosomal	1	TCGA-AN-A0AT	6	6	37897775	36442566	38012880	36438386
HSP90A1	SLC9A1	1	Intra_Chromosomal	1	TCGA-BH-A0WA	6	6	44214932	44194997	44215949	44194190

CDC5L	SPATS1	1	Intra_Chromosomal	1	TCGA-C8-A12L	6	6	44387334	44344095	44389573	44340497
REV3L	FYN	1	Intra_Chromosomal	1	TCGA-A2-A0D2	6	6	111701185	112101838	111699685	112122787
LINC00271	HBS1L	1	Intra_Chromosomal	1	TCGA-C8-A12Q	6	6	135819138	135371785	135825011	135376368
LINC00473	AK090688	1	Intra_Chromosomal	1	TCGA-A7-A0CE	6	6	166401017	166195411	166356237	166342510
USP42	GLCC1	1	Intra_Chromosomal	1	TCGA-A2-A0D1	7	7	6190137	8043538	6190138	8026521
MPLKIP	TRA2A	1	Intra_Chromosomal	1	TCGA-A2-A04P	7	7	40173828	23556147	40168217	23560304
CCM2	PPIA	1	Intra_Chromosomal	1	TCGA-A7-A26G	7	7	45078025	44838846	45102645	44825804
EXO4	SLC25A13	1	Intra_Chromosomal	1	TCGA-AR-A256	7	7	133059756	95776008	133105552	95782853
TCRBV5S1A1	TCRVB	1	Intra_Chromosomal	1	TCGA-BH-A0DG	7	7	142021357	142494046	142486396	142475819
KMT2C	CALN1	1	Intra_Chromosomal	1	TCGA-AO-A124	7	7	151855948	71571279	151854824	71680678
ACTR3B	PTPRN2	1	Intra_Chromosomal	1	TCGA-C8-A12Q	7	7	152522207	157388007	152530060	157394747
LMBR1	PTPRN2	1	Intra_Chromosomal	1	TCGA-A2-A0D2	7	7	156589083	157341713	156568126	157359629
DNAJB6	UBE3C	1	Intra_Chromosomal	1	TCGA-AR-A256	7	7	157160177	157041062	157164072	157035822
FDFT1	INTS9	1	Intra_Chromosomal	1	TCGA-E2-A15K	8	8	11660440	28707790	11662064	28711107
TRIM35	GSR	1	Intra_Chromosomal	1	TCGA-BH-A0DG	8	8	27151597	30569605	27147315	30582857
PRKDC	DEFB103A	1	Intra_Chromosomal	1	TCGA-C8-A12L	8	8	48761715	7286651	48758371	7299932
PLEKHF2	NDUFAF6	1	Intra_Chromosomal	1	TCGA-C8-A12Q	8	8	96146258	96044223	96158360	96038423
TA2F	DSCC1	1	Intra_Chromosomal	1	TCGA-AO-A124	8	8	120814034	120859320	120812332	120859594
ZHX2	LOC100499141	1	Intra_Chromosomal	1	TCGA-D8-A27F	8	8	123794185	104298135	123821632	104310733
C8orf76	NKAIN3	1	Intra_Chromosomal	1	TCGA-AO-A0J4	8	8	124238740	63492098	124234918	63227110
RNF139	NDUFB9	1	Intra_Chromosomal	1	TCGA-AO-A0J4	8	8	125487531	125555328	125494977	125517287
ZCHC7	FAM74A4	1	Intra_Chromosomal	1	TCGA-A2-A0EY	9	9	37327831	65488372	37334505	65491113
FXN	SMC5	1	Intra_Chromosomal	1	TCGA-AO-A124	9	9	71679951	72879220	71680482	72844801
LRRCSA	CCBL1	1	Intra_Chromosomal	1	TCGA-B6-A0RE	9	9	131671600	131607690	131671753	131628293
SDCCAG3	SNAPC4	1	Intra_Chromosomal	1	TCGA-AO-A0J4	9	9	139304780	139290222	139303887	139290746
SEC16A	QSOX2	1	Intra_Chromosomal	1	TCGA-A8-A094	9	9	139353586	139103298	139352621	139106354
PFKFB3	FAM208B	1	Intra_Chromosomal	1	TCGA-C8-A12Q	10	10	6186976	5788142	6243211	5787240
CAMK2G	AGAP5	1	Intra_Chromosomal	1	TCGA-AR-A256	10	10	75632747	75442552	75622653	75443223
VCL	PLAU	1	Intra_Chromosomal	1	TCGA-AR-A256	10	10	75758133	75674534	75777862	75673990
ADK	LRRTM3	1	Intra_Chromosomal	1	TCGA-BH-A18U	10	10	76430027	68857345	76446474	68736349
TRUB1	FAM160B1	1	Intra_Chromosomal	1	TCGA-AN-A0AT	10	10	116719566	116659249	116720868	116625648
KIAA1598	EMX2OS	1	Intra_Chromosomal	1	TCGA-A8-A094	10	10	118764533	119251620	118749181	119264609
CTBP2	ADAM12	1	Intra_Chromosomal	1	TCGA-A8-A08L	10	10	126799559	128019078	126728324	128022803
LSP1	TNNT3	1	Intra_Chromosomal	1	TCGA-AO-A124	11	11	1908806	1944087	1915251	1936933
ABTB2	APIP	1	Intra_Chromosomal	1	TCGA-AR-A256	11	11	34186233	34916657	34185863	34955976
EXT2	BCO31305	1	Intra_Chromosomal	1	TCGA-A2-A25B	11	11	44228509	43591317	44237053	43549310
DDB1	TMEM258	1	Intra_Chromosomal	1	TCGA-AR-A256	11	11	61076455	61556707	61076008	61556855
MACROD1	TRPT1	1	Intra_Chromosomal	1	TCGA-A7-A13D	11	11	63918711	63991813	63853471	63995865
KDM2A	RPS6KB2	1	Intra_Chromosomal	1	TCGA-AR-A1AY	11	11	66888829	67200811	66919404	67200591
KDM2A	FBXO3	1	Intra_Chromosomal	1	TCGA-A2-A0D2	11	11	66949363	33792376	66963556	33810957
MTL5	PPFIA1	1	Intra_Chromosomal	1	TCGA-EW-A1J5	11	11	68506168	70208201	68484573	70202442
UVRAG	LRTOMT	1	Intra_Chromosomal	1	TCGA-A1-A0SM	11	11	75623083	71799343	75658983	71799144
UVRAG	PAK1	1	Intra_Chromosomal	1	TCGA-E2-A109	11	11	75827059	77034405	75841313	77040425
ACER3	NARS2	1	Intra_Chromosomal	1	TCGA-AN-A0G0	11	11	76572123	78180359	76534475	78183969
ACER3	UVRAG	1	Intra_Chromosomal	1	TCGA-E2-A109	11	11	76730820	75826968	76731135	75777660
GAB2	MYO7A	1	Intra_Chromosomal	1	TCGA-A1-A0SM	11	11	78128692	76866953	76864930	78047103
BC041900	MAP6	1	Intra_Chromosomal	1	TCGA-A8-A09I	11	11	81811016	75319367	81596354	75378585
PRCP	RAB30	1	Intra_Chromosomal	1	TCGA-D8-A27H	11	11	82611277	82705164	82586926	82707008
MAAML2	CNTN5	1	Intra_Chromosomal	1	TCGA-D8-A27H	11	11	95825056	99715584	95755948	99698794
TMEM123	MMP27	1	Intra_Chromosomal	1	TCGA-A7-A13D	11	11	102319543	102563772	102278015	102564394
KDM5A	NINJ2	1	Intra_Chromosomal	1	TCGA-AO-A124	12	12	404739	675344	403743	747334
HIST4H4	MGP	1	Intra_Chromosomal	1	TCGA-EW-A1PB	12	12	14923613	15037179	14906521	15037558
FAR2	OVCH1-AS1	1	Intra_Chromosomal	1	TCGA-A8-A08L	12	12	29423571	29614667	29573420	29573762
DIP2B	ATF1	1	Intra_Chromosomal	1	TCGA-A7-A26G	12	12	51133369	51189692	51134808	51183316
CNOT2	RAB31P	1	Intra_Chromosomal	1	TCGA-AN-A0AT	12	12	70704797	70149164	70718436	70123199
ARPC3	ANAPC7	1	Intra_Chromosomal	1	TCGA-A2-A0D4	12	12	110888060	110834257	110884348	110857339
MAPKAPK5	ACAD10	1	Intra_Chromosomal	1	TCGA-A2-A0YG	12	12	112308984	112182447	112315779	112180795
ABC89	EIF2B1	1	Intra_Chromosomal	1	TCGA-A7-A13D	12	12	123428938	124107308	123426660	124108044
UBL3	MTIF3	1	Intra_Chromosomal	1	TCGA-A7-A0CE	13	13	30423649	28019293	30400252	28020391
EEF1DP3	CLDN10	1	Intra_Chromosomal	1	TCGA-AN-A04D	13	13	32421076	96212386	32476032	96174697
RB1	CDADC1	1	Intra_Chromosomal	1	TCGA-A2-A0D4	13	13	49037971	49848427	49038807	49842472
MYCBP2	RNF219	1	Intra_Chromosomal	1	TCGA-E2-A14P	13	13	77807291	79219132	77806709	79229386
TMTCA	FGF14	1	Intra_Chromosomal	1	TCGA-A2-A0D2	13	13	101277789	102527646	101275522	102910442
C14orf25	MIPOL1	1	Intra_Chromosomal	1	TCGA-A2-A0YG	14	14	38092208	37892060	38155760	37684777
ZFYVE26	RAD51B	1	Intra_Chromosomal	1	TCGA-A8-A094	14	14	68283251	68934889	68282655	68823556
APBA2	GABRB3	1	Intra_Chromosomal	1	TCGA-A7-A26G	15	15	29288009	26828561	29342904	26839782
TP53BP1	DMXL2	1	Intra_Chromosomal	1	TCGA-A7-A26G	15	15	43724392	51809364	43723632	51819288
SMAD3	DIS3L	1	Intra_Chromosomal	1	TCGA-A7-A26G	15	15	67358698	66604062	67382082	66602550
POLR3K	SNRNP25	1	Intra_Chromosomal	1	TCGA-A2-A0EY	16	16	101558	105459	99556	101817
SPSB3	MEIOB	1	Intra_Chromosomal	1	TCGA-A2-A0D2	16	16	1831359	1912117	1828601	1916384

TSC2	TMEM204	1	Intra_Chromosomal	1	TCGA-AR-A256	16	16	2098754	1604783	2099242	1594341
LITAF	BCAR4	1	Intra_Chromosomal	1	TCGA-BH-A0DG	16	16	11680742	11914154	11668750	11918547
TMEM159	DNAH3	1	Intra_Chromosomal	1	TCGA-AR-A0TX	16	16	21185469	21074004	21189844	21076571
ZNF771	ZNF48	1	Intra_Chromosomal	1	TCGA-AN-A0AT	16	16	30419515	30408651	30426784	30408080
ESRP2	SLC7A6	1	Intra_Chromosomal	1	TCGA-A2-A0EY	16	16	68265081	68321649	68264843	68313356
TCF25	SPIRE2	1	Intra_Chromosomal	1	TCGA-A2-A0D2	16	16	89940267	89934597	89940372	89931657
AFG3L1P	TUBB3	1	Intra_Chromosomal	1	TCGA-AO-A124	16	16	90048331	89989879	90049602	89990089
ZZEF1	CCDC144A	1	Intra_Chromosomal	1	TCGA-BH-A18U	17	17	3928213	16610783	3927700	16609917
USP43	ENDOV	1	Intra_Chromosomal	1	TCGA-E2-A109	17	17	9605017	78398832	9611443	78397656
PIGL	TBC1D26	1	Intra_Chromosomal	1	TCGA-E2-A14P	17	17	16137384	15643414	16163400	15642949
FLOT2	PEX12	1	Intra_Chromosomal	1	TCGA-A2-A25B	17	17	27215963	33904610	27213765	33906925
MYO18A	NUFIP2	1	Intra_Chromosomal	1	TCGA-B6-A0RE	17	17	27492960	27594548	27459026	27599951
NSRP1	ANKRD13B	1	Intra_Chromosomal	1	TCGA-A2-A25B	17	17	28445191	27934760	28456335	27926059
SUZ12P1	USP32	1	Intra_Chromosomal	1	TCGA-BH-A18R	17	17	29059141	58332619	58335610	29059458
NF1	CDK5RAP3	1	Intra_Chromosomal	1	TCGA-BH-A18R	17	17	29592357	46057959	29619650	46055793
C17orf75	TOP2A	1	Intra_Chromosomal	1	TCGA-A8-A09I	17	17	30662342	38569877	30662135	38570980
RDH1	KRT28	1	Intra_Chromosomal	1	TCGA-A8-A08B	17	17	34252519	38950298	34232730	38950502
DUSP14	EME1	1	Intra_Chromosomal	1	TCGA-A8-A09I	17	17	35850064	48452546	35869106	48452106
DDX52	ARL17A	1	Intra_Chromosomal	1	TCGA-A2-A0D1	17	17	35993318	44634996	35993063	44636143
SCS7	FLOT2	1	Intra_Chromosomal	1	TCGA-A1-A0SM	17	17	36533668	27216044	36543892	27216100
ARHGAP23	ASIC2	1	Intra_Chromosomal	1	TCGA-AR-A0TX	17	17	36636124	31351032	36636262	31351228
PLXDC1	FBXO47	1	Intra_Chromosomal	1	TCGA-A8-A08B	17	17	37262107	37101389	37246895	37103656
FBXL20	MYO1D	1	Intra_Chromosomal	1	TCGA-A8-A08S	17	17	37457254	31107802	37456702	31152901
FBXL20	MIEN1	1	Intra_Chromosomal	1	TCGA-A7-A13D	17	17	37557614	37886544	37533702	37899258
MED1	STAC2	1	Intra_Chromosomal	1	TCGA-AO-A0JM	17	17	37575970	37368649	37575317	37368720
CDK12	PPM1E	1	Intra_Chromosomal	1	TCGA-A8-A09I	17	17	37628016	57046900	37629535	57044614
ERBB2	ARL5C	1	Intra_Chromosomal	1	TCGA-AO-A0JM	17	17	37868701	37321392	37868832	37321632
MED24	IKZF3	1	Intra_Chromosomal	1	TCGA-E2-A14P	17	17	38176526	37949186	38176257	37958511
THRA	CACNB1	1	Intra_Chromosomal	1	TCGA-AR-A0TX	17	17	38233191	37343854	38233292	37347795
WIPF2	USP32	1	Intra_Chromosomal	1	TCGA-BH-A18R	17	17	38375744	58422969	38405118	58426292
RARA	PGAP3	1	Intra_Chromosomal	1	TCGA-A8-A08B	17	17	38474700	37842272	38480044	37853584
RARA	MYO1D	1	Intra_Chromosomal	1	TCGA-A8-A09I	17	17	38487648	31107802	38504380	31205294
GPATCH8	NPLOC4	1	Intra_Chromosomal	1	TCGA-A8-A07B	17	17	42512433	79596831	42502423	79603184
DCAKD	PLCD3	1	Intra_Chromosomal	1	TCGA-C8-A12Q	17	17	43138256	43198739	43131853	43200849
MRPL27	TMEM99	1	Intra_Chromosomal	1	TCGA-A8-A092	17	17	48450492	38989367	38960250	48448007
LUC7L3	C17orf64	1	Intra_Chromosomal	1	TCGA-BH-A18R	17	17	48814387	58067623	48815068	58039771
NME2	AXIN2/CEP11	1	Intra_Chromosomal	1	TCGA-AO-A0JM	17	17	49243858	63637183	63671478	49243871
MBTD1	EFCAB3	1	Intra_Chromosomal	1	TCGA-A8-A09I	17	17	49336504	60451175	49332940	60450637
STXBP4	MSI2	1	Intra_Chromosomal	1	TCGA-A8-A09I	17	17	53150437	55693331	53152080	55680068
MSI2	PTP	1	Intra_Chromosomal	1	TCGA-D8-A27F	17	17	55339553	53844696	55401387	53806275
PTRH2	DHX40	1	Intra_Chromosomal	1	TCGA-C8-A12L	17	17	57784732	57676098	57671868	57774399
PTRH2	TBC1D3P1-DI	1	Intra_Chromosomal	1	TCGA-C8-A12L	17	17	57784732	58054131	57774399	58058360
VMP1	RAD51C	1	Intra_Chromosomal	1	TCGA-BH-A18R	17	17	57816308	56787220	57826974	56784368
DCAF7	VMP1	1	Intra_Chromosomal	1	TCGA-BH-A18R	17	17	61628176	57808782	61636393	57802423
DDX42	BRIP1	1	Intra_Chromosomal	1	TCGA-A2-A25B	17	17	61884014	59886118	61885101	59898084
TEX2	LOC645638	1	Intra_Chromosomal	1	TCGA-A8-A09I	17	17	62340528	58162564	62314139	58163601
GNA13	PLEKHM1P	1	Intra_Chromosomal	1	TCGA-A1-A0SM	17	17	63049620	62825367	63040924	62838622
PITPNC1	BPTF	1	Intra_Chromosomal	1	TCGA-A2-A25B	17	17	65574373	65914830	65593808	65913797
SAP30BP	KCTD2	1	Intra_Chromosomal	1	TCGA-AO-A124	17	17	73664705	73031327	73667229	73031167
PGS1	BIRC5	1	Intra_Chromosomal	1	TCGA-EW-A1PB	17	17	76395618	76219546	76396518	76214749
CSNK1D	SECTM1	1	Intra_Chromosomal	1	TCGA-A2-A04T	17	17	80206751	80285168	80198496	80290660
RALBP1	TWSG1	1	Intra_Chromosomal	1	TCGA-D8-A27H	18	18	9475174	9337191	9478705	9328515
CEP192	AQP4-AS1	1	Intra_Chromosomal	1	TCGA-AO-A124	18	18	13073184	24727662	13086344	24696493
ELP2	MAPRE2	1	Intra_Chromosomal	1	TCGA-A2-A0D2	18	18	33734962	32681910	33736155	32680326
SMAD2	ZBTB7C	1	Intra_Chromosomal	1	TCGA-A8-A092	18	18	45456732	45864769	45432246	45916681
TCF3	AP3D1	1	Intra_Chromosomal	1	TCGA-A7-A13D	19	19	1621837	2111827	1621272	2112012
SAFB2	TINCR	1	Intra_Chromosomal	1	TCGA-C8-A12L	19	19	5591759	5562222	5589260	5577098
MAP2K7	SH3GL1	1	Intra_Chromosomal	1	TCGA-C8-A12L	19	19	7968953	4361793	7971119	4361946
ELAVL1	HDGFRP2	1	Intra_Chromosomal	1	TCGA-A2-A0D4	19	19	8056528	4475272	4471894	8056005
IF3	SLC44A2	1	Intra_Chromosomal	1	TCGA-AO-A124	19	19	10765163	10736929	10780808	10715342
SMARCA4	ICAM1	1	Intra_Chromosomal	1	TCGA-AR-A256	19	19	11071850	10385441	11085959	10384015
NFX	RAD23A	1	Intra_Chromosomal	1	TCGA-AN-A0G0	19	19	13189549	13058662	13188834	13043653
EP515L1	MED26	1	Intra_Chromosomal	1	TCGA-A7-A13D	19	19	16582724	16689220	16555630	16721428
UBA2	PEPD	1	Intra_Chromosomal	1	TCGA-AO-A0J4	19	19	34919475	33904549	34920477	33906144
PRR19	PPP1R37	1	Intra_Chromosomal	1	TCGA-BH-A0H0	19	19	42806655	45641772	42813176	45602764
MEGF8	PRR19	1	Intra_Chromosomal	1	TCGA-BH-A0H0	19	19	42855913	42814423	42856497	42813948
TEAD2	PTOV1-AS1	1	Intra_Chromosomal	1	TCGA-A7-A13D	19	19	49845695	50348149	49844604	50351367
ASXL1	TM95F4	1	Intra_Chromosomal	1	TCGA-A7-A13D	20	20	30956926	30720816	30974484	30702813
ZNF341	BPIFB1	1	Intra_Chromosomal	1	TCGA-A7-A13D	20	20	32346612	31894717	32347513	31892679
CHMP4B	CBFA2T2	1	Intra_Chromosomal	1	TCGA-AR-A256	20	20	32399464	32232153	32405234	32231061

PMEP1	PTGIS	1	Intra_Chromosomal	1	TCGA-AR-A0TX	20	20	56284530	48130932	56245575	48132256
STX16	NCOA5	1	Intra_Chromosomal	1	TCGA-AR-A0TX	20	20	57227143	44708092	57227722	44712010
LOC284757	FAM83D	1	Intra_Chromosomal	1	TCGA-A8-A094	20	20	58755971	37580182	58760177	37577629
TAF4	GATA5	1	Intra_Chromosomal	1	TCGA-A7-A13D	20	20	60639507	61040977	60613858	61048015
TRAPPC10	BRWD1	1	Intra_Chromosomal	1	TCGA-E2-A11G	21	21	45432441	40630598	45433924	40631167
DGCR2	CLTCL1	1	Intra_Chromosomal	1	TCGA-A7-A26G	22	22	19076881	19263353	19075891	19266161
ZNRF3	ASCC2	1	Intra_Chromosomal	1	TCGA-A8-A094	22	22	29280054	30221769	30229571	29329465
MVH9	CACNG2	1	Intra_Chromosomal	1	TCGA-BH-A0BW	22	22	36783852	36962540	36748154	36977898
CBY1	GTPBP1	1	Intra_Chromosomal	1	TCGA-E2-A152	22	22	39052755	39104850	39062503	39103234
NUP50	RBFOX2	1	Intra_Chromosomal	1	TCGA-AR-A0TX	22	22	45560177	36206051	45563412	36308297
CELSR1	CERK	1	Intra_Chromosomal	1	TCGA-E2-A14P	22	22	46929524	47083103	46890193	47086144
SH3BP1	MAP7D2	1	Intra_Chromosomal	1	TCGA-A7-A26G		X	19854243	20026516	19807058	20028288
ACOT9	APOO	1	Intra_Chromosomal	1	TCGA-A7-A13D		X	23748644	23851729	23729920	23902081
BC000869	BC019880	2	Intra_Chromosomal	2	TCGA-A2-A04T;TCGA-C8-A12Q	9	9	66553558	41948877	NA	NA
BMS1P1	AGAP4	2	Intra_Chromosomal	2	TCGA-A7-A26G;TCGA-AO-A0J4	10	10	46751426	46342760	NA	NA
LINC00152	RUFY1	2	Inter_Chromosomal	1	TCGA-EW-A1P8	2	5	87755164	179028893	NA	NA
LOC541471	RUFY1	2	Inter_Chromosomal	1	TCGA-EW-A1P8	2	5	112252462	179028893	NA	NA
ITGB5	WAC-AS1	2	Inter_Chromosomal	1	TCGA-A8-A09X	3	10	124560230	28814937	NA	NA
FAM157A	AL137655	2	Inter_Chromosomal	1	TCGA-BH-A0BW	3	11	197935258	139152	NA	NA
WWP1	CPB2	2	Inter_Chromosomal	1	TCGA-E2-A11G	8	13	87474075	46661955	NA	NA
SMC5	IMMP2L	2	Inter_Chromosomal	1	TCGA-AO-A124	9	7	72882891	110603621	NA	NA
FOCAD	MAML2	2	Inter_Chromosomal	1	TCGA-AN-A0AT	9	11	20953064	95713127	NA	NA
AL137655	BC071667	2	Inter_Chromosomal	1	TCGA-BH-A0BW	11	16	150836	90244125	NA	NA
TMEM123	BC045769	2	Inter_Chromosomal	1	TCGA-A7-A13D	11	17	102319543	43297821	NA	NA
RARA	NARS2	2	Inter_Chromosomal	1	TCGA-A1-A0SM	17	11	38487648	78282489	NA	NA
ZNF544	SENP6	2	Inter_Chromosomal	1	TCGA-A8-A094	19	6	58741828	76385576	NA	NA
SRRD	MST1	2	Inter_Chromosomal	1	TCGA-A2-A0D2	22	3	26882029	49722089	NA	NA
PBX1	DISC1/TSNAX	2	Intra_Chromosomal	1	TCGA-A7-A13D	1	1	164532548	232094574	NA	NA
BC024248	BC030125	2	Intra_Chromosomal	1	TCGA-A7-A0CE	2	2	78712920	78252550	NA	NA
AB12	CYP20A1	2	Intra_Chromosomal	1	TCGA-A7-A26G	2	2	204231767	204161197	NA	NA
APPL1	SPATA12	2	Intra_Chromosomal	1	TCGA-C8-A12Q	3	3	57287766	57107394	NA	NA
GMF1	MLF1	2	Intra_Chromosomal	1	TCGA-C8-A12Q	3	3	158384175	158310223	NA	NA
IGF2BP2	NCEH1	2	Intra_Chromosomal	1	TCGA-EW-A1PB	3	3	185540941	172365904	NA	NA
FDCSP	C4orf40	2	Intra_Chromosomal	1	TCGA-A7-A13D	4	4	71099932	71020082	NA	NA
RIPK1	SERP1NB9	2	Intra_Chromosomal	1	TCGA-E2-A15K	6	6	3064293	2900855	NA	NA
C4B_2	CYP21A2	2	Intra_Chromosomal	1	TCGA-A1-A0SM	6	6	31969637	32006871	NA	NA
FIG4	WASF1	2	Intra_Chromosomal	1	TCGA-AO-A124	6	6	110064975	110434663	NA	NA
DTX2	UPK3B	2	Intra_Chromosomal	1	TCGA-AO-A0J4	7	7	76133762	76140220	NA	NA
POLR2J3	RASA4B	2	Intra_Chromosomal	1	TCGA-AO-A0J4	7	7	102207444	102152428	NA	NA
AQ301666	POLR2J3	2	Intra_Chromosomal	1	TCGA-BH-A0EA	7	7	102322512	102210371	NA	NA
RAB2A	LOC157381	2	Intra_Chromosomal	1	TCGA-A2-A0CM	8	8	61504528	125953705	NA	NA
HIATL2	LOC10013201	2	Intra_Chromosomal	1	TCGA-AN-A0AT	9	9	99711837	97101118	NA	NA
RALGPS1	MVB12B	2	Intra_Chromosomal	1	TCGA-C8-A12L	9	9	129831635	129265456	NA	NA
PRPF18	CACNB2	2	Intra_Chromosomal	1	TCGA-C8-A12L	10	10	13647744	18439812	NA	NA
SYT12	C11orf80	2	Intra_Chromosomal	1	TCGA-C8-A12Q	11	11	66802309	66605838	NA	NA
KDM2A	RHOD	2	Intra_Chromosomal	1	TCGA-EW-A1PB	11	11	66888829	66833367	NA	NA
RAD51AP1	CD27-AS1	2	Intra_Chromosomal	1	TCGA-B6-A0RE	12	12	4662313	6548842	NA	NA
VWF	LOC338817	2	Intra_Chromosomal	1	TCGA-B6-A0RE	12	12	6155889	11706500	NA	NA
CHD4	VWF	2	Intra_Chromosomal	1	TCGA-B6-A0RE	12	12	6715440	6184717	NA	NA
WBP11	GUCY2C	2	Intra_Chromosomal	1	TCGA-A7-A13D	12	12	14952569	14809551	NA	NA
PITPNM2	LOC10019094	2	Intra_Chromosomal	1	TCGA-AR-A256	12	12	123594932	130521562	NA	NA
MAPK1IP1L	ARF6	2	Intra_Chromosomal	1	TCGA-A2-A0EY	14	14	55518521	50359974	NA	NA
PLEKH02	ZNF609	2	Intra_Chromosomal	1	TCGA-A7-A13D	15	15	65140941	64915026	NA	NA
MKL2	SNX29	2	Intra_Chromosomal	1	TCGA-A2-A04T	16	16	14334341	12121177	NA	NA
PARN	RRN3	2	Intra_Chromosomal	1	TCGA-A7-A13D	16	16	14711447	15178562	NA	NA
CHD9	SPG7	2	Intra_Chromosomal	1	TCGA-A8-A092	16	16	53191453	89590414	NA	NA
CNOT1	GOT2	2	Intra_Chromosomal	1	TCGA-C8-A12Q	16	16	58633140	58757806	NA	NA
MAP2K4	DNAH9	2	Intra_Chromosomal	1	TCGA-E2-A109	17	17	12032604	11865184	NA	NA
RAPGEF1L	MAPT	2	Intra_Chromosomal	1	TCGA-A8-A07B	17	17	38340601	44101322	NA	NA
RARA	PRR11	2	Intra_Chromosomal	1	TCGA-A2-A0YG	17	17	38474700	57247109	NA	NA
SKA2	CACNG4	2	Intra_Chromosomal	1	TCGA-BH-A18R	17	17	57232492	65014305	NA	NA
CACNG4	C17orf51	2	Intra_Chromosomal	1	TCGA-A2-A0EY	17	17	64961247	21438799	NA	NA
BPTF	AMZ2	2	Intra_Chromosomal	1	TCGA-E2-A14P	17	17	65822453	66246329	NA	NA
USP36	TIMP2	2	Intra_Chromosomal	1	TCGA-A7-A13D	17	17	76834669	76870001	NA	NA
WDR45B	RAB40B	2	Intra_Chromosomal	1	TCGA-A2-A04P	17	17	80601825	80622432	NA	NA
AP1M1	CIB3	2	Intra_Chromosomal	1	TCGA-AO-A124	19	19	16317219	16279095	NA	NA
BC041478	LINC00665	2	Intra_Chromosomal	1	TCGA-E2-A109	19	19	37753557	36804224	NA	NA
NXT1	VPS16	2	Intra_Chromosomal	1	TCGA-E2-A109	20	20	23331698	2840365	NA	NA
C20orf112	COMMD7	2	Intra_Chromosomal	1	TCGA-A8-A08L	20	20	31172372	31294562	NA	NA
RUNX1	BC047600	2	Intra_Chromosomal	1	TCGA-A2-A04P	21	21	36231771	29584667	NA	NA

LIMK2	OSBP2	2	Intra_Chromosomal	1	TCGA-A7-A13D		22	22	31621805	31266416	NA	NA
MMGT1	CT45A5	2	Intra_Chromosomal	1	TCGA-A0-A0I4	X		X	135053217	134946214	NA	NA
F8	CLIC2	2	Intra_Chromosomal	1	TCGA-A1-A0SM	X		X	154114409	154528458	NA	NA
SLC22A20	HORMAD1	3	Inter_Chromosomal	3	TCGA-A2-A0CM;TCGA-AN-A0G0;TCGA-BH-A0E0		11	1	65006951	150692014	NA	NA
SCARB1	UBC	3	Intra_Chromosomal	2	TCGA-A8-A094;TCGA-AN-A0AT		12	12	125348141	125398320	NA	NA
PAPD5	SHANK2	3	Inter_Chromosomal	1	TCGA-EW-A1J5		16	11	50250106	70858384	NA	NA
KRT6B	KRT7	3	Intra_Chromosomal	1	TCGA-A7-A0CE		12	12	52842626	52632464	NA	NA
DAPK1	RPS29	3	Inter_Chromosomal	1	TCGA-BH-A18U		9	14	90254730	50052767	NA	NA
WHSC1L1	PSD3	3	Intra_Chromosomal	1	TCGA-BH-A18U		8	8	38146005	18513195	NA	NA
EIF2AK2	CEBP2	3	Intra_Chromosomal	1	TCGA-A2-A04P		2	2	37349649	37429046	NA	NA
CSN3	FDCSP	3	Intra_Chromosomal	1	TCGA-A2-A04P		4	4	71108382	71096912	NA	NA
COL1A2	abParts	3	Inter_Chromosomal	1	TCGA-A7-A26G		7	14	94057197	106583791	NA	NA
USP36	MRD51	3	Inter_Chromosomal	1	TCGA-A2-A25B		17	6	76808942	9732534	NA	NA
RARA	ZNF732/ZNF1	3	Inter_Chromosomal	1	TCGA-AR-A0TX		17	4	38487648	337571	NA	NA
ABAT	C16orf62	3	Intra_Chromosomal	1	TCGA-AR-A0TX		16	16	8768568	19663298	NA	NA
SPAG5	BLMH	3	Intra_Chromosomal	1	TCGA-A2-A25B		17	17	26925528	28576186	NA	NA
	9-Sep NARF	3	Intra_Chromosomal	1	TCGA-BH-A0DG		17	17	75303279	80430400	NA	NA
HOOK3	IKBKB	3	Intra_Chromosomal	1	TCGA-A2-A0D1		8	8	42798588	42150961	NA	NA
TBCD	SLC9A3R1	3	Intra_Chromosomal	1	TCGA-A7-A26G		17	17	80847573	72758151	NA	NA
C19orf25	MED1	3	Inter_Chromosomal	1	TCGA-A2-A0EY		19	17	1478773	37604157	NA	NA
COL3A1	COL1A2	3	Inter_Chromosomal	1	TCGA-A7-A26G		2	7	189869090	94037159	NA	NA
RARA	PCTP	3	Intra_Chromosomal	1	TCGA-A2-A0D4		17	17	38474700	53848467	NA	NA
GSK3B	FSTL1	3	Intra_Chromosomal	1	TCGA-E2-A14P		3	3	119720893	120134874	NA	NA
CLTC	LOC645638	3	Intra_Chromosomal	1	TCGA-A8-A09I		17	17	57721844	58162564	NA	NA
ARHGEF3	ACP6	3	Inter_Chromosomal	1	TCGA-A0-A0J6		3	1	56916320	147131890	NA	NA
FRG1B	PPP1R1B	3	Inter_Chromosomal	1	TCGA-E2-A14P		20	17	29625984	37786225	NA	NA
RCC2	PADI4	3	Intra_Chromosomal	1	TCGA-A2-A25B		1	1	17755602	17681028	NA	NA
ZFP91/ZFP91	RAB6A	3	Intra_Chromosomal	1	TCGA-A8-A092		11	11	58352357	73390765	NA	NA
BCAS3	RNF169	3	Inter_Chromosomal	1	TCGA-BH-A18R		17	11	58786686	74521229	NA	NA
MCM5	HMOX1	3	Intra_Chromosomal	1	TCGA-AN-A0AT		22	22	35804556	35785857	NA	NA
abParts	CD74	3	Inter_Chromosomal	1	TCGA-A0-A0J4		14	5	106360104	149782188	NA	NA
NARS2	PLXD1	3	Inter_Chromosomal	1	TCGA-A1-A0SM		11	17	78239888	37296085	NA	NA
FDCSP	MGP	3	Inter_Chromosomal	1	TCGA-A7-A13D		4	12	71091899	15037179	NA	NA
NAALADL2	PEX5L	3	Intra_Chromosomal	1	TCGA-A0-A0JM		3	3	175189546	179537764	NA	NA
BCR	MRV1	3	Inter_Chromosomal	1	TCGA-C8-A12Q		22	11	23524426	10673729	NA	NA
JUP	CTSD	3	Inter_Chromosomal	1	TCGA-A8-A08S		17	11	39681095	1775368	NA	NA
ARHGEF35	COA1	3	Intra_Chromosomal	1	TCGA-E2-A14P		7	7	143892631	43688251	NA	NA
CDK12	FBXL20	3	Intra_Chromosomal	1	TCGA-A0-A0JM		17	17	37628016	37439108	NA	NA
GPR137C	FERMT2	3	Intra_Chromosomal	1	TCGA-A2-A0EY		14	14	53020309	53331571	NA	NA
PPP1R1B	PIPOX	3	Intra_Chromosomal	1	TCGA-A2-A0D1		17	17	37791979	27379938	NA	NA
RARA	POLDIP2	3	Intra_Chromosomal	1	TCGA-A2-A0D1		17	17	38487648	26681611	NA	NA
RASSF3	AKO55974	3	Intra_Chromosomal	1	TCGA-AR-A0TX		12	12	65085359	67959294	NA	NA
ARHGEF5	COA1	3	Intra_Chromosomal	1	TCGA-E2-A14P		7	7	144052594	43688251	NA	NA
GORASP2	AK126351	3	Intra_Chromosomal	1	TCGA-A8-A094		2	2	171785913	159535901	NA	NA
ADNP	DPM1	3	Intra_Chromosomal	1	TCGA-A2-A25B		20	20	49545188	49562460	NA	NA
AK311167/LC	PPP1R1B	3	Inter_Chromosomal	1	TCGA-E2-A14P		9	17	68745967	37786225	NA	NA
NOTCH3	PSAP	3	Inter_Chromosomal	1	TCGA-A7-A13D		19	10	15273276	73581764	NA	NA
SCNN1G	COL27A1	3	Inter_Chromosomal	1	TCGA-A2-A04T		16	9	23224484	116924995	NA	NA
TMEM135	AAMDC	3	Intra_Chromosomal	1	TCGA-A2-A0D4		11	11	86802437	77552065	NA	NA
ARHGEF34P	COA1	3	Intra_Chromosomal	1	TCGA-E2-A14P		7	7	143991211	43688251	NA	NA
KRT19	CTSD	3	Inter_Chromosomal	1	TCGA-A8-A08S		17	11	39681095	1775368	NA	NA
TCF12	TEX9	3	Intra_Chromosomal	1	TCGA-A2-A04T		15	15	57213296	56665639	NA	NA
LINC00875	BC065231	3	Intra_Chromosomal	1	TCGA-AN-A0XR		1	1	14374201	145004781	NA	NA
USP22	MYH10	3	Intra_Chromosomal	1	TCGA-A8-A092		17	17	20919065	8508300	NA	NA
KANS1	LRR37A2	3	Intra_Chromosomal	1	TCGA-B6-A0RE		17	17	44269785	44594728	NA	NA
SPECC1	TMEM11	3	Intra_Chromosomal	1	TCGA-A2-A0EY		17	17	20059549	21102153	NA	NA
COL1A1	COL3A1	3	Inter_Chromosomal	1	TCGA-A2-A0EY		17	2	48274371	189855730	NA	NA
LRRCS9	B4GALNT2	3	Intra_Chromosomal	1	TCGA-E2-A109		17	17	48469759	47218609	NA	NA
PPF1A1	FRMD8	3	Intra_Chromosomal	1	TCGA-E2-A109		11	11	70118542	65161044	NA	NA
RPL36	MFSD12	3	Intra_Chromosomal	1	TCGA-C8-A12L		19	19	5690338	3544937	NA	NA
TMEM123	MMP7	3	Intra_Chromosomal	1	TCGA-A2-A04P		11	11	102272270	102391535	NA	NA
RNGTT	BACH2	3	Intra_Chromosomal	1	TCGA-A2-A04T		6	6	89650790	90718575	NA	NA
CKS1B	SHC1	3	Intra_Chromosomal	1	TCGA-C8-A12Q		1	1	154947280	154938993	NA	NA
NUDCD1	EIF3H	3	Intra_Chromosomal	1	TCGA-A0-A0J4		8	8	110346122	117671219	NA	NA
ZCCHC7	FAM74A3	3	Intra_Chromosomal	1	TCGA-A2-A0EY		9	9	37327831	40721585	NA	NA
ACTR3C	PTPRN2	3	Intra_Chromosomal	1	TCGA-C8-A12Q		7	7	149981842	157388007	NA	NA
RBAK-RBAKD	PMS2P4	3	Intra_Chromosomal	1	TCGA-A2-A0EY		7	7	5097410	66764411	NA	NA
TFDP1	TMCO3	3	Intra_Chromosomal	1	TCGA-A7-A13D		13	13	114277601	114164553	NA	NA
CENPF	SUSD4	3	Intra_Chromosomal	1	TCGA-AR-A24Z		1	1	214776664	223442017	NA	NA
FZR1	EVPLL	3	Inter_Chromosomal	1	TCGA-A2-A0EY		19	17	3523056	18291533	NA	NA

HIATL1	LOC1001320:	3	Intra_Chromosomal	1	TCGA-AN-A0AT	9	9	97200810	97101118	NA	NA	
SCGB2A2	abParts	3	Inter_Chromosomal	11	1	TCGA-AR-A0TX	14	14	62040628	106336629	NA	NA
UBQLN1	GKAP1	3	Intra_Chromosomal	1	TCGA-A2-A25B	9	9	86322415	86421475	NA	NA	
BCAS3	GH2	3	Intra_Chromosomal	17	1	TCGA-E2-A14P	17	17	59161925	61958879	NA	NA
LOC154761	FAM115A	3	Intra_Chromosomal	1	TCGA-A7-A13D	7	7	143530340	143560889	NA	NA	
MPZL1	MPC2	3	Intra_Chromosomal	1	TCGA-E2-A109	1	1	167691479	167893775	NA	NA	
NF1	NLE1	3	Intra_Chromosomal	17	1	TCGA-A8-A09I	17	17	29497015	33464212	NA	NA
NPEPL1	EVI5	3	Inter_Chromosomal	20	1	TCGA-AN-A04D	20	1	57282256	93202184	NA	NA
RARRES1	MRV11-AS1	3	Inter_Chromosomal	3	1	TCGA-EW-A1PB	11	11	158449929	10615664	NA	NA
RASA1	BC034940	3	Intra_Chromosomal	5	1	TCGA-C8-A12Q	5	5	86564807	86433271	NA	NA
DACH2	MYH9	3	Inter_Chromosomal	5	1	TCGA-AO-A0J4	22	22	86068007	36681375	NA	NA
INADL	HSD52	3	Intra_Chromosomal	1	TCGA-AR-A256	1	1	62393501	59599002	NA	NA	
PITPNC1	PSMD12	3	Intra_Chromosomal	17	1	TCGA-A7-A13D	17	17	65374318	65353694	NA	NA
RARA	PLXDC1	3	Intra_Chromosomal	17	1	TCGA-A1-A0SM	17	17	38487648	37296085	NA	NA
NPNT	TBCK	3	Intra_Chromosomal	4	1	TCGA-AO-A0JM	4	4	106819158	107114927	NA	NA
PBXIP1	LOC338817	3	Inter_Chromosomal	1	1	TCGA-B6-A0RE	12	12	154918048	11705514	NA	NA
SCAF4	CHMP1A	3	Inter_Chromosomal	21	1	TCGA-A8-A092	16	16	33057362	89713739	NA	NA
SETD5	PSMD6	3	Intra_Chromosomal	3	1	TCGA-E2-A109	3	3	9495552	64008199	NA	NA
ALDH4A1	S100A14	3	Intra_Chromosomal	1	1	TCGA-A8-A07B	1	1	19203702	153588412	NA	NA
AMACR	C1QTNF3	3	Intra_Chromosomal	5	1	TCGA-C8-A12L	5	5	33998746	34024113	NA	NA
APP	CYR1	3	Intra_Chromosomal	21	1	TCGA-A7-A26G	21	21	27326904	27938687	NA	NA
BC071667	RPL23AP53	3	Inter_Chromosomal	16	1	TCGA-A8-A08L	8	8	90282606	163710	NA	NA
C11orf30	KC136298/KC	3	Intra_Chromosomal	11	1	TCGA-E2-A109	11	11	76158052	69305263	NA	NA
FBXL20	SIRT6	3	Inter_Chromosomal	17	1	TCGA-A2-A0EY	19	19	37557614	4175934	NA	NA
MRPL48	DTX4	3	Intra_Chromosomal	11	1	TCGA-A8-A092	11	11	73536841	58972149	NA	NA
MRPS28/TPD	EIF3H	3	Intra_Chromosomal	8	1	TCGA-C8-A130	8	8	80915234	117671219	NA	NA
NADSYN1	TRIM9	3	Inter_Chromosomal	11	1	TCGA-A2-A0D4	14	14	71189515	51492078	NA	NA
NCOR2	UBC	3	Intra_Chromosomal	12	1	TCGA-A8-A08S	12	12	125051854	125398320	NA	NA
NSF	LRRC37A2	3	Intra_Chromosomal	17	1	TCGA-AN-A04D	17	17	44782220	45099216	NA	NA
STK24	ATF7	3	Inter_Chromosomal	13	1	TCGA-A7-A13D	12	12	99228999	53994805	NA	NA
WIPF2	EZH1	3	Intra_Chromosomal	17	1	TCGA-A8-A09I	17	17	38421398	40882936	NA	NA
abParts	TPT1	3	Inter_Chromosomal	22	1	TCGA-E2-A11G	13	13	23237984	45915297	NA	NA
ACTN4	EIF3K	3	Intra_Chromosomal	19	1	TCGA-AN-A04D	19	19	39218666	39110977	NA	NA
ANXA5	COL1A2	3	Inter_Chromosomal	4	1	TCGA-A1-A0SM	7	7	122593688	94044538	NA	NA
C16orf52	OSBPL2	3	Inter_Chromosomal	16	1	TCGA-AR-A0TX	20	20	22019728	60831113	NA	NA
CDK19	ZFAND3	3	Intra_Chromosomal	6	1	TCGA-AR-A24Z	6	6	111136212	38120011	NA	NA
CPSF1	ARHGAP39	3	Intra_Chromosomal	8	1	TCGA-A7-A26G	8	8	145620650	145834057	NA	NA
CYBRD1	SLC38A11	3	Intra_Chromosomal	2	1	TCGA-A2-A25B	2	2	172398303	165772483	NA	NA
DHX40	SCN4A	3	Intra_Chromosomal	17	1	TCGA-A8-A09I	17	17	57679977	62024527	NA	NA
FAM222B	USP32	3	Intra_Chromosomal	17	1	TCGA-BH-A18R	17	17	27139227	58422969	NA	NA
GRB7	PGAP3	3	Intra_Chromosomal	17	1	TCGA-A8-A09I	17	17	37894645	37830932	NA	NA
HNRNPA2B1	RPS4X	3	Inter_Chromosomal	7	1	TCGA-AN-A0AT	7	7	26232115	71496084	NA	NA
KIF1B	UBE4B	3	Intra_Chromosomal	1	1	TCGA-A7-A26G	1	1	10292492	10155519	NA	NA
NFIX	abParts	3	Inter_Chromosomal	19	1	TCGA-AN-A0G0	14	14	13186485	106357905	NA	NA
TMEM123	MMP20	3	Intra_Chromosomal	11	1	TCGA-AO-A0J6	11	11	102319543	102449873	NA	NA
AZM	BLCAP	3	Inter_Chromosomal	12	1	TCGA-A2-A0D4	20	20	9260120	36156083	NA	NA
ACTN4	PRKCSH	3	Intra_Chromosomal	19	1	TCGA-AN-A0AT	19	19	39208714	11557087	NA	NA
AK126351	LY75/LY75-CT	3	Intra_Chromosomal	2	1	TCGA-AO-A124	2	2	159591240	160717400	NA	NA
CIRH1A	PRMT7	3	Intra_Chromosomal	16	1	TCGA-A7-A26G	16	16	69191143	68390604	NA	NA
COL1A2	PHB2	3	Inter_Chromosomal	7	1	TCGA-A2-A0EY	12	12	94043587	7074875	NA	NA
CPQ	SDC2	3	Intra_Chromosomal	8	1	TCGA-BH-A0WA	8	8	97892233	97605708	NA	NA
CRIP1	abParts	3	Intra_Chromosomal	14	1	TCGA-A8-A09I	14	14	105954853	106814840	NA	NA
FASN	NCL	3	Inter_Chromosomal	17	1	TCGA-AR-A0TX	2	2	80036598	232323100	NA	NA
HSP90AB1	DMXL1	3	Inter_Chromosomal	6	1	TCGA-E2-A109	5	5	44221115	118532066	NA	NA
KRT19	CTS2	3	Inter_Chromosomal	17	1	TCGA-A8-A08S	20	20	39681095	57570814	NA	NA
OBSCN	SLU7	3	Inter_Chromosomal	1	1	TCGA-EW-A1J5	5	5	228482744	159835704	NA	NA
PACSN2	GNAS	3	Inter_Chromosomal	22	1	TCGA-AN-A0G0	20	20	43411027	57470667	NA	NA
PARVA	POLD3	3	Intra_Chromosomal	11	1	TCGA-C8-A12Q	11	11	12399330	74305106	NA	NA
PHKG2	SRCAP	3	Intra_Chromosomal	16	1	TCGA-AN-A0AT	16	16	30764878	30740287	NA	NA
PTMS	ANP32B	3	Inter_Chromosomal	12	1	TCGA-AN-A04D	9	9	6878840	100773553	NA	NA
RNF169	CADM2-AS2	3	Inter_Chromosomal	11	1	TCGA-BH-A18R	3	3	74528759	85850101	NA	NA
SBF2	TMEM99	3	Inter_Chromosomal	11	1	TCGA-A8-A08L	17	17	10215449	38989367	NA	NA
SHC1	LOC1005056f	3	Intra_Chromosomal	1	1	TCGA-A7-A13D	1	1	154941854	155018722	NA	NA
UBB	abParts	3	Inter_Chromosomal	17	1	TCGA-BH-A0BW	14	14	16286053	106334885	NA	NA
WDR59	CFDP1	3	Intra_Chromosomal	16	1	TCGA-AR-A256	16	16	74949768	75339080	NA	NA