

Supplementary Table 1

Specimen code	Gender	Age at time of procedure	Initial Dx specimen?	Prior Tx?	Age at first dx	Status at last report	Classification (WHO 2008)	MYC FISH	MYC IHC (% positive tumor cells)	Other IHC	Flow cytometry
HGB-01	F	77	Yes	No	-	Alive, in clinical remission	Diffuse large B-cell lymphoma, NOS	Negative	20%	CD10-, BCL6-/+, IRF4+	
HGB-02	M	67	Yes	No	-	Alive, in clinical remission	Diffuse large B-cell lymphoma, NOS	Negative	<10%	BCL6+	CD10+
HGB-03	M	51	Yes	No	-	Alive, in clinical remission	Diffuse large B-cell lymphoma, NOS	Negative	70%	BCL6+	CD10+
HGB-04	F	37	Yes	No	-	Alive, in clinical remission	Primary mediastinal large B-cell lymphoma	Negative		CD10-, BCL6+, IRF4+	
HGB-05	M	66	Yes	No	-	Deceased	Diffuse large B-cell lymphoma, NOS	Positive	90%	CD10+, BCL6+, IRF4-	
HGB-06	F	58	Yes	No	-	Alive, in clinical remission	B-cell lymphoma unclassifiable, with features intermediate between Burkitt lymphoma and diffuse large B-cell lymphoma	Negative	40%	CD10+, BCL6+, IRF4-/+	
HGB-07	M	46	Yes	No	-	Alive, in clinical remission	Diffuse large B-cell lymphoma and follicular lymphoma, grade 3B	Positive	75%	BCL6+	CD10+
MCL-01	M	69	Yes	No	-	Alive, in clinical remission	Mantle cell lymphoma	Negative		CyclinD1+	
MCL-02	M	64	No	Yes	48	Alive with disease	Mantle cell lymphoma	Negative		CyclinD1+	
MCL-03	F	56	No	Yes	53	Alive, in clinical remission	Mantle cell lymphoma	Negative		CyclinD1+	
MCL-04	M	85	Yes	No	-	Alive with disease	Mantle cell lymphoma	Negative		CyclinD1+	
SLL-01	M	49	No	Yes	46	Alive with disease	Chronic lymphocytic leukemia / small lymphocytic lymphoma				
SLL-02	F	81	No	No	75	Alive, in clinical remission	Chronic lymphocytic leukemia / small lymphocytic lymphoma				
SLL-03	M	45	Yes	No	-	Alive, in clinical remission	Chronic lymphocytic leukemia / small lymphocytic lymphoma				

Supplementary table 2

Sample	Type	Chr 1	Strand 1	Position 1	Chr 2	Strand 2	Position 2	Tumor reads	Normal panel reads	Class	Span	Site 1	Site 2
HGB-01	HGB	12	(+)	11922736	12	(+)	12039080	14	0	inversion	116352	Intron of ETV6(+): 17Kb after exon 2	Intron of ETV6(+): 122bp after exon 7
HGB-01	HGB	14	(+)	106113558	14	(-)	106326972	9	0	deletion	213414	IGR: 121Kb before TMEM121(+)	IGR: 57Kb before KIAA0125(+)
HGB-01	HGB	2	(+)	54981835	2	(-)	54983054	5	0	deletion	1219	Intron of EML6(+): 29Kb after exon 1	Intron of EML6(+): 31Kb after exon 1
HGB-01	HGB	9	(-)	5522369	20	(+)	46205727	4	0	inter_chr	NaN	5'-UTR of PDCD1LG2(+): 178bp before coding start	5'-UTR of NCOA3(+): 45Kb before coding start
HGB-01	HGB	3	(+)	56192273	3	(-)	56203332	3	0	deletion	11059	Intron of ERC2(-): 9Kb before exon 5	Intron of ERC2(-): 4Kb after exon 4
HGB-01	HGB	6	(+)	104612424	X	(-)	46903759	3	0	inter_chr	NaN	IGR: 564Kb before HACE1(-)	Intron of PHF16(+): 5Kb after exon 8
HGB-01	HGB	6	(-)	159521657	6	(+)	159564248	3	0	tandem_dup	42591	IGR: 62Kb before TAGAP(-)	IGR: 26Kb before FNDC1(+)
HGB-01	HGB	9	(+)	5521559	9	(-)	5589542	2	0	deletion	67983	5'-UTR of PDCD1LG2(+): 988bp before coding start	IGR: 40Kb before KIAA1432(+)
HGB-01	HGB	9	(+)	5588252	20	(-)	46205839	2	0	inter_chr	NaN	IGR: 41Kb before KIAA1432(+)	5'-UTR of NCOA3(+): 45Kb before coding start
HGB-02	HGB	14	(+)	106330463	18	(-)	60793446	52	0	inter_chr	NaN	IGR: 53Kb before KIAA0125(+)	3'-UTR of BCL2(-): 2Kb after coding stop
HGB-02	HGB	5	(+)	88122971	5	(+)	88125178	36	0	inversion	2204	5'-UTR of MEF2C(-): 3Kb before coding start	5'-UTR of MEF2C(-): 6Kb before coding start
HGB-02	HGB	5	(-)	88124589	5	(-)	88126602	25	0	inversion	2013	5'-UTR of MEF2C(-): 5Kb before coding start	5'-UTR of MEF2C(-): 7Kb before coding start
HGB-02	HGB	1	(+)	244311848	1	(-)	244322686	3	0	deletion	10838	IGR: 95Kb before ZNF238(+)	IGR: 106Kb before ZNF238(+)
HGB-03	HGB	14	(+)	106330469	14	(-)	106354411	49	0	deletion	23942	IGR: 53Kb before KIAA0125(+)	IGR: 29Kb before KIAA0125(+)
HGB-03	HGB	7	(-)	44380893	14	(+)	89735995	3	0	inter_chr	NaN	IGR: 41Kb before NUDCD3(-)	Intron of FOXN3(-): 11Kb after exon 4
HGB-04	HGB	16	(+)	10971457	16	(+)	27325660	57	0	long_range	16354209	Intron of CIITA(+): 215bp after exon 1	5'-UTR of IL4R(+): 26Kb before coding start
HGB-04	HGB	16	(-)	10972664	16	(-)	27326808	21	0	long_range	16354144	Intron of CIITA(+): 1Kb after exon 1	5'-UTR of IL4R(+): 25Kb before coding start
HGB-04	HGB	17	(+)	43300053	17	(-)	43301189	16	0	deletion	1136	Intron of FMNL1(+): 433bp after exon 1	Intron of FMNL1(+): 2Kb after exon 1
HGB-04	HGB	14	(+)	106065783	14	(-)	106326588	15	0	deletion	260805	IGR: 73Kb before TMEM121(+)	IGR: 57Kb before KIAA0125(+)
HGB-04	HGB	1	(+)	93425150	5	(+)	138883968	13	0	inter_chr	NaN	Intron of FAM69A(-): 2Kb after exon 1	IGR: 29Kb before TMEM173(-)
HGB-04	HGB	14	(+)	89773278	14	(-)	89849346	11	0	deletion	76068	Intron of FOXN3(-): 26Kb before exon 4	Intron of FOXN3(-): 29Kb after exon 2
HGB-04	HGB	17	(-)	26132301	17	(+)	26139107	8	0	tandem_dup	6806	IGR: 5Kb after NOS2(-)	IGR: 55Kb before NOS2(-)
HGB-04	HGB	5	(+)	88175864	5	(-)	88177357	5	0	deletion	1493	5'-UTR of MEF2C(-): 56Kb before coding start	5'-UTR of MEF2C(-): 58Kb before coding start
HGB-04	HGB	3	(-)	18779884	3	(+)	187823100	5	0	tandem_dup	43216	IGR: 92Kb before LPP(+)	IGR: 49Kb before LPP(+)

HGB-04	HGB	1	(-)	93425282	5	(-)	138883726	3	0	inter_chr	NaN	Intron of FAM69A(-): 2Kb after exon 1	IGR: 29Kb before TMEM173(-)
HGB-04	HGB	2	(+)	231821477	2	(-)	231827177	3	0	deletion	5700	IGR: 39Kb before SPATA3(+)	IGR: 34Kb before SPATA3(+)
HGB-04	HGB	7	(+)	82581473	9	(+)	10835416	3	0	inter_chr	NaN	Exon 5 of PCLO(-)	IGR: 223Kb after PTPRD(-)
HGB-05	HGB	2	(+)	89157693	2	(-)	89158830	104	0	deletion	1130	IGR: 52Kb after FLJ40330(+)	IGR: 53Kb after FLJ40330(+)
HGB-05	HGB	14	(+)	106322765	14	(+)	106324880	35	1	inversion	2115	IGR: 61Kb before KIAA0125(+)	IGR: 59Kb before KIAA0125(+)
HGB-05	HGB	14	(+)	106068560	14	(-)	106092315	6	0	deletion	23755	IGR: 76Kb before TMEM121(+)	IGR: 99Kb before TMEM121(+)
HGB-05	HGB	5	(+)	131824289	5	(-)	131828712	4	0	deletion	4423	Intron of IRF1(-): 572bp before exon 3	Promoter of IRF1(-): 2Kb from tx start
HGB-05	HGB	6	(+)	134492572	14	(-)	106240755	4	0	inter_chr	NaN	Intron of SGK1(-): 203bp after exon 11	IGR: 143Kb before KIAA0125(+)
HGB-05	HGB	8	(-)	129185231	22	(+)	23222979	3	0	inter_chr	NaN	IGR: 23Kb before MIR1208(+)	IGR: 7Kb before IGLL5(+)
HGB-05	HGB	16	(+)	89556324	16	(-)	89597180	3	0	deletion	40856	5'-UTR of ANKRD11(-): 173Kb before coding start	Exon 7 of SPG7(+)
HGB-06	HGB	2	(+)	89161433	2	(-)	89512906	23	0	deletion	351557	IGR: 55Kb after FLJ40330(+)	IGR: 448Kb before FLJ40330(+)
HGB-06	HGB	5	(+)	158519449	5	(-)	158525345	20	0	deletion	5903	Intron of EBF1(-): 3Kb after exon 4	Intron of EBF1(-): 1Kb after exon 1
HGB-06	HGB	14	(+)	106329426	14	(-)	106579108	6	0	deletion	249682	IGR: 54Kb before KIAA0125(+)	IGR: 143Kb before ADAM6(-)
HGB-06	HGB	14	(+)	106329445	14	(-)	106829834	4	1	deletion	500389	IGR: 54Kb before KIAA0125(+)	IGR: 86Kb before NCRNA00226(+)
HGB-07	HGB	14	(+)	106329436	18	(-)	60793456	17	0	inter_chr	NaN	IGR: 54Kb before KIAA0125(+)	3'-UTR of BCL2(-): 2Kb after coding stop
HGB-07	HGB	2	(-)	8555359	14	(-)	107176543	9	0	inter_chr	NaN	IGR: 267Kb before ID2(+)	IGR: 238Kb before LOC100133469(+)
HGB-07	HGB	2	(+)	8555515	14	(+)	107176642	9	0	inter_chr	NaN	IGR: 267Kb before ID2(+)	IGR: 238Kb before LOC100133469(+)
MCL-01	MCL	11	(-)	69346813	14	(+)	106330468	47	0	inter_chr	NaN	IGR: 109Kb before CCND1(+)	IGR: 53Kb before KIAA0125(+)
MCL-01	MCL	14	(+)	106331446	14	(-)	106539073	20	0	deletion	207627	IGR: 52Kb before KIAA0125(+)	IGR: 103Kb before ADAM6(-)
MCL-02	MCL	11	(-)	69298658	14	(+)	106330846	59	0	inter_chr	NaN	IGR: 157Kb before CCND1(+)	IGR: 53Kb before KIAA0125(+)
MCL-02	MCL	11	(+)	69468029	11	(-)	69471149	14	0	deletion	3120	3'-UTR of CCND1(+): 2Kb after coding stop	IGR: 2Kb after CCND1(+)
MCL-02	MCL	14	(+)	106330466	14	(-)	107178838	11	0	deletion	848372	IGR: 53Kb before KIAA0125(+)	IGR: 240Kb before LOC100133469(+)
MCL-02	MCL	2	(-)	89161085	2	(-)	90260251	8	1	long_range	1099166	IGR: 55Kb after FLJ40330(+)	IGR: 1Mb before FLJ40330(+)
MCL-02	MCL	1	(+)	26611895	1	(-)	26639065	3	0	deletion	27170	Intron of UBXN11(-): 60bp after exon 10	5'-UTR of UBXN11(-): 10Kb before coding start
MCL-02	MCL	10	(-)	75403873	10	(-)	75531021	2	0	inversion	127148	Promoter of MYOZ1(-): 2Kb from tx start	3'-UTR of SEC24C(+): 168bp after coding stop
MCL-02	MCL	10	(+)	75526995	10	(-)	75531106	2	0	deletion	4111	Intron of SEC24C(+): 67bp after exon 14	3'-UTR of SEC24C(+): 253bp after coding stop
MCL-03	MCL	11	(-)	69263501	14	(+)	106330469	338	0	inter_chr	NaN	IGR: 192Kb before CCND1(+)	IGR: 53Kb before KIAA0125(+)

MCL-03	MCL	22	(+)	22453621	22	(-)	23247171	20	0	deletion	793549	IGR: 142Kb before TOP3B(-)	IGR: 17Kb before IGLL5(+)
MCL-03	MCL	14	(+)	106329444	14	(-)	106815837	7	0	deletion	486393	IGR: 54Kb before KIAA0125(+)	IGR: 72Kb before NCRNA00226(+)
MCL-03	MCL	1	(-)	102349419	1	(+)	149223945	6	0	long_range	46874526	Intron of OLFM3(-): 47Kb before exon 2	IGR: 56Kb before LOC388692(+)
MCL-04	MCL	14	(+)	106330468	14	(-)	106552286	34	0	deletion	221818	IGR: 53Kb before KIAA0125(+)	IGR: 116Kb before ADAM6(-)
MCL-04	MCL	2	(+)	89160437	2	(-)	89326669	24	0	deletion	166370	IGR: 54Kb after FLJ40330(+)	IGR: 261Kb before FLJ40330(+)
MCL-04	MCL	11	(-)	69370366	14	(+)	106330466	8	0	inter_chr	NaN	IGR: 86Kb before CCND1(+)	IGR: 53Kb before KIAA0125(+)
SLL-01	SLL	14	(+)	106329479	14	(-)	106805206	124	0	deletion	475727	IGR: 54Kb before KIAA0125(+)	IGR: 61Kb before NCRNA00226(+)
SLL-01	SLL	14	(+)	69257611	14	(-)	106325701	22	0	long_range	37068120	Intron of ZFP36L1(-): 377bp before exon 2	IGR: 58Kb before KIAA0125(+)
SLL-01	SLL	22	(+)	23199233	22	(-)	23241800	15	0	deletion	42609	IGR: 31Kb before IGLL5(+)	IGR: 4Kb after IGLL5(+)
SLL-01	SLL	14	(+)	106330468	14	(-)	106359396	11	0	deletion	29017	IGR: 53Kb before KIAA0125(+)	IGR: 24Kb before KIAA0125(+)
SLL-02	SLL	14	(+)	106329462	14	(-)	106370540	465	0	deletion	41083	IGR: 54Kb before KIAA0125(+)	IGR: 13Kb before KIAA0125(+)
SLL-02	SLL	14	(+)	106330473	14	(-)	106877612	163	0	deletion	547139	IGR: 53Kb before KIAA0125(+)	IGR: 61Kb before LOC100133469(+)
SLL-02	SLL	2	(+)	89161072	2	(-)	89416828	39	0	deletion	255870	IGR: 55Kb after FLJ40330(+)	IGR: 352Kb before FLJ40330(+)
SLL-03	SLL	14	(+)	106331660	14	(-)	106350728	255	0	deletion	19068	IGR: 52Kb before KIAA0125(+)	IGR: 33Kb before KIAA0125(+)
SLL-03	SLL	14	(+)	106351921	14	(-)	106714359	61	0	deletion	362438	IGR: 32Kb before KIAA0125(+)	IGR: 30Kb before NCRNA00226(+)
SLL-03	SLL	14	(+)	106329452	14	(-)	106573292	36	0	deletion	243840	IGR: 54Kb before KIAA0125(+)	IGR: 137Kb before ADAM6(-)
SLL-03	SLL	1	(+)	175271848	7	(+)	28735795	6	0	inter_chr	NaN	IGR: 20Kb before TNR(-)	Intron of CREB5(+): 10Kb after exon 1
SLL-03	SLL	14	(+)	61870835	14	(-)	61873522	6	0	deletion	2697	Intron of PRKCH(+): 13Kb after exon 2	Intron of PRKCH(+): 16Kb after exon 2
DOHH-2	HGB	14	(+)	106329452	18	(-)	60793494	407	0	inter_chr	NaN	IGR: 54Kb before KIAA0125(+)	3'-UTR of BCL2(-): 2Kb after coding stop
DOHH-2	HGB	14	(+)	106212183	14	(-)	106326380	54	0	deletion	114197	IGR: 172Kb before KIAA0125(+)	IGR: 57Kb before KIAA0125(+)
DOHH-2	HGB	2	(+)	89160769	2	(+)	90260249	44	1	long_range	1099479	IGR: 55Kb after FLJ40330(+)	IGR: 1Mb before FLJ40330(+)
DOHH-2	HGB	8	(-)	128748204	14	(+)	106114283	21	0	inter_chr	NaN	Promoter of MYC(+): 106bp from tx start	IGR: 121Kb before TMEM121(+)
DOHH-2	HGB	22	(+)	23135646	22	(-)	23247228	7	0	deletion	111703	IGR: 30Kb before MIR650(+)	IGR: 17Kb before IGLL5(+)
DOHH-2	HGB	1	(+)	1656297	1	(-)	1658413	4	0	deletion	2116	Promoter of CDK11A(-): 506bp from tx start	Promoter of CDK11A(-): 3Kb from tx start
Karpas-422	HGB	14	(+)	106330465	18	(-)	60793491	88	0	inter_chr	NaN	IGR: 53Kb before KIAA0125(+)	3'-UTR of BCL2(-): 2Kb after coding stop
Karpas-422	HGB	14	(+)	106212241	14	(-)	106325742	33	0	deletion	113493	IGR: 172Kb before KIAA0125(+)	IGR: 58Kb before KIAA0125(+)
Karpas-422	HGB	15	(+)	101476052	15	(-)	101541546	7	0	deletion	65494	Intron of LRRK1(+): 11Kb after exon 2	Intron of LRRK1(+): 7Kb before exon 7

Karpas-422	HGB	17	(+)	59992809	17	(-)	60004652	7	0	deletion	11843	Intron of INTS2(-): 3Kb before exon 6	Intron of INTS2(-): 629bp before exon 2
Karpas-422	HGB	4	(-)	133270462	4	(+)	139068862	4	0	long_range	5798400	IGR: 800Kb before PCDH10(+)	IGR: 16Kb before SLC7A11(-)
Karpas-422	HGB	4	(-)	133259086	4	(+)	139039545	3	0	long_range	5780459	IGR: 811Kb before PCDH10(+)	IGR: 46Kb before SLC7A11(-)
Karpas-422	HGB	10	(-)	100885631	10	(-)	101012696	3	0	inversion	127065	Intron of HPSE2(-): 18Kb after exon 3	IGR: 17Kb after HPSE2(-)
Karpas-422	HGB	11	(+)	111704725	11	(+)	111707862	3	0	inversion	3137	Intron of ALG9(-): 2Kb after exon 13	Intron of ALG9(-): 329bp after exon 12
Oci-Ly-1	HGB	8	(+)	96243998	8	(+)	128761686	420	0	long_range	32517669	IGR: 14Kb before C8orf37(-)	IGR: 13Kb before MYC(+)
Oci-Ly-1	HGB	14	(+)	106330077	18	(-)	60793548	362	0	inter_chr	NaN	IGR: 54Kb before KIAA0125(+)	3'-UTR of BCL2(-): 2Kb after coding stop
Oci-Ly-1	HGB	18	(+)	60826572	18	(-)	60979881	105	0	deletion	153300	Intron of BCL2(-): 31Kb before exon 3	Intron of BCL2(-): 5Kb after exon 2
Oci-Ly-1	HGB	14	(+)	106093964	14	(-)	106327833	102	0	deletion	233869	IGR: 101Kb before TMEM121(+)	IGR: 56Kb before KIAA0125(+)
Oci-Ly-1	HGB	8	(+)	96109429	8	(-)	96137432	80	0	deletion	28000	IGR: 37Kb before PLEKHF2(+)	IGR: 9Kb before PLEKHF2(+)
Oci-Ly-1	HGB	14	(+)	106239381	14	(-)	106327831	52	0	deletion	88450	IGR: 144Kb before KIAA0125(+)	IGR: 56Kb before KIAA0125(+)
Oci-Ly-1	HGB	8	(+)	130872889	8	(+)	131091738	32	0	inversion	218844	Intron of FAM49B(-): 2Kb after exon 8	Intron of ASAP1(-): 412bp after exon 25
Oci-Ly-1	HGB	14	(+)	106069264	14	(-)	106239691	11	0	deletion	170427	IGR: 76Kb before TMEM121(+)	IGR: 144Kb before KIAA0125(+)
Oci-Ly-1	HGB	8	(+)	96181978	8	(-)	130859242	7	0	long_range	34677264	IGR: 36Kb before PLEKHF2(+)	Intron of FAM49B(-): 122bp before exon 14
Oci-Ly-1	HGB	18	(+)	60807790	18	(-)	60946868	7	0	deletion	139205	Intron of BCL2(-): 12Kb before exon 3	Intron of BCL2(-): 38Kb after exon 2
Oci-Ly-1	HGB	8	(-)	96208925	8	(-)	131029425	5	0	long_range	34820500	IGR: 49Kb before C8orf37(-)	IGR: 35Kb before ASAP1(-)
Oci-Ly-7	HGB	2	(+)	89160435	2	(-)	89428188	120	0	deletion	267837	IGR: 54Kb after FLJ40330(+)	IGR: 363Kb before FLJ40330(+)
Oci-Ly-7	HGB	8	(-)	128748107	14	(+)	107170910	45	0	inter_chr	NaN	Promoter of MYC(+): 208bp from tx start	IGR: 232Kb before LOC100133469(+)
Oci-Ly-7	HGB	14	(+)	106330465	14	(-)	106641695	23	0	deletion	311230	IGR: 53Kb before KIAA0125(+)	IGR: 103Kb before NCRNA00226(+)
Granta-519	MCL	11	(-)	69391328	14	(+)	106330475	80	0	inter_chr	NaN	IGR: 65Kb before CCND1(+)	IGR: 53Kb before KIAA0125(+)
Granta-519	MCL	11	(+)	69466209	14	(-)	103522460	20	0	inter_chr	NaN	3'-UTR of CCND1(+): 159bp after coding stop	Intron of CDC42BPB(-): 876bp after exon 1
Granta-519	MCL	22	(+)	22517073	22	(-)	23247168	19	0	deletion	730100	IGR: 82Kb before VPREB1(+)	IGR: 17Kb before IGLL5(+)
Granta-519	MCL	18	(+)	57100190	18	(-)	57560667	4	0	deletion	460477	3'-UTR of CCBE1(-): 3Kb after coding stop	IGR: 7Kb before PMAIP1(+)
Granta-519	MCL	18	(+)	70764202	18	(+)	70771031	4	0	inversion	6829	IGR: 263Kb before NETO1(-)	IGR: 270Kb before NETO1(-)
Granta-519	MCL	17	(-)	47609291	20	(+)	9859116	3	0	inter_chr	NaN	IGR: 37Kb before NGFR(+)	IGR: 39Kb after PAK7(-)
Granta-519	MCL	18	(+)	37970093	18	(+)	57560068	3	0	long_range	19589975	IGR: 1Mb before KC6(-)	IGR: 7Kb before PMAIP1(+)
Granta-519	MCL	18	(+)	37990606	18	(+)	57556854	2	0	long_range	19566248	IGR: 1Mb before KC6(-)	IGR: 10Kb before PMAIP1(+)

Granta-519	MCL	18	(-)	57549365	18	(-)	57558758	2	0	inversion	9393	IGR: 18Kb before PMAIP1(+)	IGR: 8Kb before PMAIP1(+)
JeKo-1	MCL	11	(-)	69346872	14	(+)	106330075	96	0	inter_chr	NaN	IGR: 109Kb before CCND1(+)	IGR: 54Kb before KIAA0125(+)
JeKo-1	MCL	14	(+)	106330468	14	(-)	107178834	34	0	deletion	848366	IGR: 53Kb before KIAA0125(+)	IGR: 240Kb before LOC100133469(+)
JeKo-1	MCL	19	(-)	14464765	19	(+)	14481940	18	0	tandem_dup	17149	IGR: 27Kb before CD97(+)	IGR: 10Kb before CD97(+)
JeKo-1	MCL	12	(-)	1101971	12	(-)	31755450	10	0	long_range	30653479	5'-UTR of ERC1(+): 35Kb before coding start	IGR: 45Kb before C12orf72(+)
JeKo-1	MCL	8	(-)	8144725	8	(-)	8224936	8	0	inversion	80211	IGR: 31Kb before SGK223(-)	Intron of SGK223(-): 9Kb after exon 2
JeKo-1	MCL	2	(+)	111826080	2	(-)	112467941	7	0	deletion	641861	Intron of ACOXL(+): 19Kb after exon 16	IGR: 59Kb before ANAPC1(-)
JeKo-1	MCL	16	(-)	1952972	16	(+)	31129235	7	0	long_range	29176263	IGR: 8Kb before HS3ST6(-)	Intron of MYST1(+): 22bp after exon 1
JeKo-1	MCL	8	(+)	8665440	8	(+)	128773927	5	0	long_range	12010852 4	Intron of MFHAS1(-): 10Kb before exon 2	IGR: 26Kb before MYC(+)
JeKo-1	MCL	8	(-)	127246846	8	(-)	127432197	5	0	inversion	185351	IGR: 318Kb before FAM84B(-)	IGR: 132Kb before FAM84B(-)
JeKo-1	MCL	19	(+)	14481187	19	(-)	14482858	5	1	deletion	1671	IGR: 11Kb before CD97(+)	IGR: 9Kb before CD97(+)
JeKo-1	MCL	8	(+)	127348471	8	(-)	127426217	4	0	deletion	77746	IGR: 216Kb before FAM84B(-)	IGR: 138Kb before FAM84B(-)
JeKo-1	MCL	12	(+)	101211779	12	(-)	101244172	3	0	deletion	32393	5'-UTR of ANO4(+): 84Kb before coding start	5'-UTR of ANO4(+): 51Kb before coding start
JeKo-1	MCL	22	(+)	43020556	22	(+)	43033909	3	0	inversion	13353	Intron of CYB5R3(-): 662bp before exon 8	Intron of CYB5R3(-): 1Kb before exon 2
JeKo-1	MCL	12	(+)	31755237	12	(+)	32448271	2	0	inversion	693034	IGR: 45Kb before C12orf72(+)	Intron of BICD1(+): 1Kb after exon 3
Mino	MCL	11	(-)	69346818	14	(+)	106330847	202	0	inter_chr	NaN	IGR: 109Kb before CCND1(+)	IGR: 53Kb before KIAA0125(+)
Mino	MCL	22	(+)	22698073	22	(-)	23247266	118	0	deletion	549282	IGR: 46Kb before LOC96610(+)	IGR: 17Kb before IGLL5(+)
Mino	MCL	2	(+)	231070144	2	(-)	231471342	82	0	deletion	401192	Intron of SP110(-): 3Kb after exon 8	IGR: 61Kb after SP100(+)
Mino	MCL	14	(+)	106329444	14	(-)	106691742	40	0	deletion	362298	IGR: 54Kb before KIAA0125(+)	IGR: 53Kb before NCRNA00226(+)
Mino	MCL	22	(+)	23063639	22	(-)	23241797	36	0	deletion	178157	IGR: 75Kb before GGTL2(+)	IGR: 4Kb after IGLL5(+)
Mino	MCL	10	(-)	26926124	10	(-)	27239476	3	0	inversion	313352	IGR: 6Kb before LOC731789(+)	IGR: 19Kb before NCRNA00202(-)
Mino	MCL	14	(+)	106178108	14	(-)	106324608	3	0	deletion	146500	IGR: 185Kb before TMEM121(+)	IGR: 59Kb before KIAA0125(+)
Rec-1	MCL	11	(-)	69346856	14	(+)	106330077	85	0	inter_chr	NaN	IGR: 109Kb before CCND1(+)	IGR: 54Kb before KIAA0125(+)
Rec-1	MCL	2	(+)	89161436	2	(-)	89326717	56	0	deletion	165281	IGR: 55Kb after FLJ40330(+)	IGR: 261Kb before FLJ40330(+)
Rec-1	MCL	14	(+)	106330447	14	(-)	106452709	41	0	deletion	122262	IGR: 53Kb before KIAA0125(+)	IGR: 17Kb before ADAM6(-)
Rec-1	MCL	9	(+)	139397291	9	(-)	139439683	27	0	deletion	42400	Intron of NOTCH1(-): 346bp before exon 28	Intron of NOTCH1(-): 492bp after exon 1
Rec-1	MCL	11	(+)	69466484	11	(-)	69470422	17	0	deletion	3938	3'-UTR of CCND1(+): 434bp after coding stop	IGR: 1Kb after CCND1(+)

Rec-1	MCL	16	(+)	28936908	16	(-)	28996081	5	0	deletion	59173	Promoter of RABEP2(-): 376bp from tx start	Promoter of LAT(+): 66bp from tx start
Rec-1	MCL	9	(+)	21869788	9	(-)	22103702	4	0	deletion	233914	IGR: 4Kb after MTAP(+)	5'-UTR of CDKN2BAS(+): 17Kb before coding start
Rec-1	MCL	7	(+)	24053842	7	(-)	24057174	3	0	deletion	3332	IGR: 270Kb before NPY(+)	IGR: 267Kb before NPY(+)
Rec-1	MCL	8	(-)	41892389	12	(-)	19241842	3	0	inter_chr	NaN	Intron of MYST3(-): 14Kb after exon 3	IGR: 41Kb before PLEKHA5(+)

Supplementary table 3

Sample	Chr 1	Strand 1	Position 1	Chr 2	Strand 2	Position 2	Class	Target gene	Site 1	Site 2	WGS supporting read pairs	Normal panel read pairs	Functional derivative chromosome	Detected by PEAR-ChIP	PEAR-ChIP read pairs	PEAR-ChIP reads fold change over WGS	PEAR-ChIP Enrichment over WGS	Total WGS read pairs	Total H3K27ac read pairs
DOHH-2	14	(-)	106379091	18	(+)	60793492	inter_chr	BCL2	IGR: 5Kb before KIAA0125(+)	3'-UTR of BCL2(-): 2Kb after coding stop	20	0	No	No, detected reciprocal rearrangement				516,649,244	32,859,703
DOHH-2	14	(+)	106329465	18	(-)	60793498	inter_chr	BCL2	IGR: 54Kb before KIAA0125(+)	3'-UTR of BCL2(-): 2Kb after coding stop	24	0	Yes	Yes	407	16.96	266.63	516,649,244	32,859,703
DOHH-2	8	(+)	128748200	14	(-)	106114286	inter_chr	MYC	Promoter of MYC(+): 115bp from tx start	IGR: 121Kb before TMEM121(+)	16	0	No	No, detected reciprocal rearrangement				516,649,244	32,859,703
DOHH-2	8	(-)	128748204	14	(+)	106114283	inter_chr	MYC	Promoter of MYC(+): 110bp from tx start	IGR: 121Kb before TMEM121(+)	10	0	Yes	Yes	21	2.10	33.02	516,649,244	32,859,703
Karpas-422	14	(-)	106363806	18	(+)	60793486	inter_chr	BCL2	IGR: 20Kb before KIAA0125(+)	3'-UTR of BCL2(-): 2Kb after coding stop	23	0	No	No, detected reciprocal rearrangement				495,169,085	33,946,517
Karpas-422	14	(+)	106330464	18	(-)	60793493	inter_chr	BCL2	IGR: 53Kb before KIAA0125(+)	3'-UTR of BCL2(-): 2Kb after coding stop	52	0	Yes	Yes	88	1.69	24.69	495,169,085	33,946,517
Oci-Ly-1	14	(-)	106363814	18	(+)	60793548	inter_chr	BCL2	IGR: 20Kb before KIAA0125(+)	3'-UTR of BCL2(-): 2Kb after coding stop	42	0	No	No, detected reciprocal rearrangement				476,682,889	15,191,731
Oci-Ly-1	14	(+)	106330075	18	(-)	60793552	inter_chr	BCL2	IGR: 54Kb before KIAA0125(+)	3'-UTR of BCL2(-): 2Kb after coding stop	52	0	Yes	Yes	362	6.96	218.44	476,682,889	15,191,731
Oci-Ly-1	8	(+)	96243998	8	(+)	128761686	inversion	MYC	IGR: 14Kb before C8orf37(-)	IGR: 13Kb before MYC(+)	222	0	Yes	Yes	420	1.89	59.36	476,682,889	15,191,731
Oci-Ly-7	8	(+)	128748095	14	(-)	107170887	inter_chr	MYC	Promoter of MYC(+): 220bp from tx start	IGR: 232Kb before LOC100133469(+)	22	0	No	No, detected reciprocal rearrangement				433,079,741	45,818,574
Oci-Ly-7	8	(-)	128748108	14	(+)	107170921	inter_chr	MYC	Promoter of MYC(+): 201bp from tx start	IGR: 232Kb before LOC100133469(+)	7	0	Yes	Yes	45	6.43	60.76	433,079,741	45,818,574