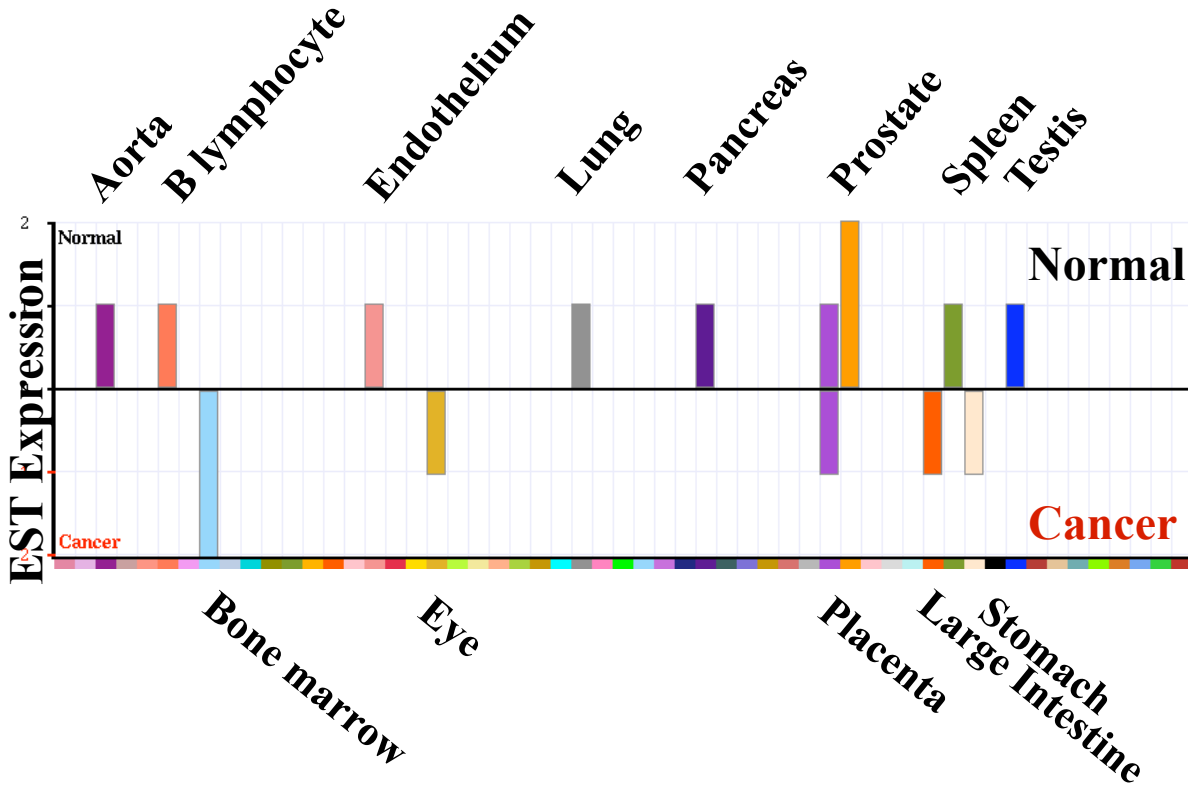
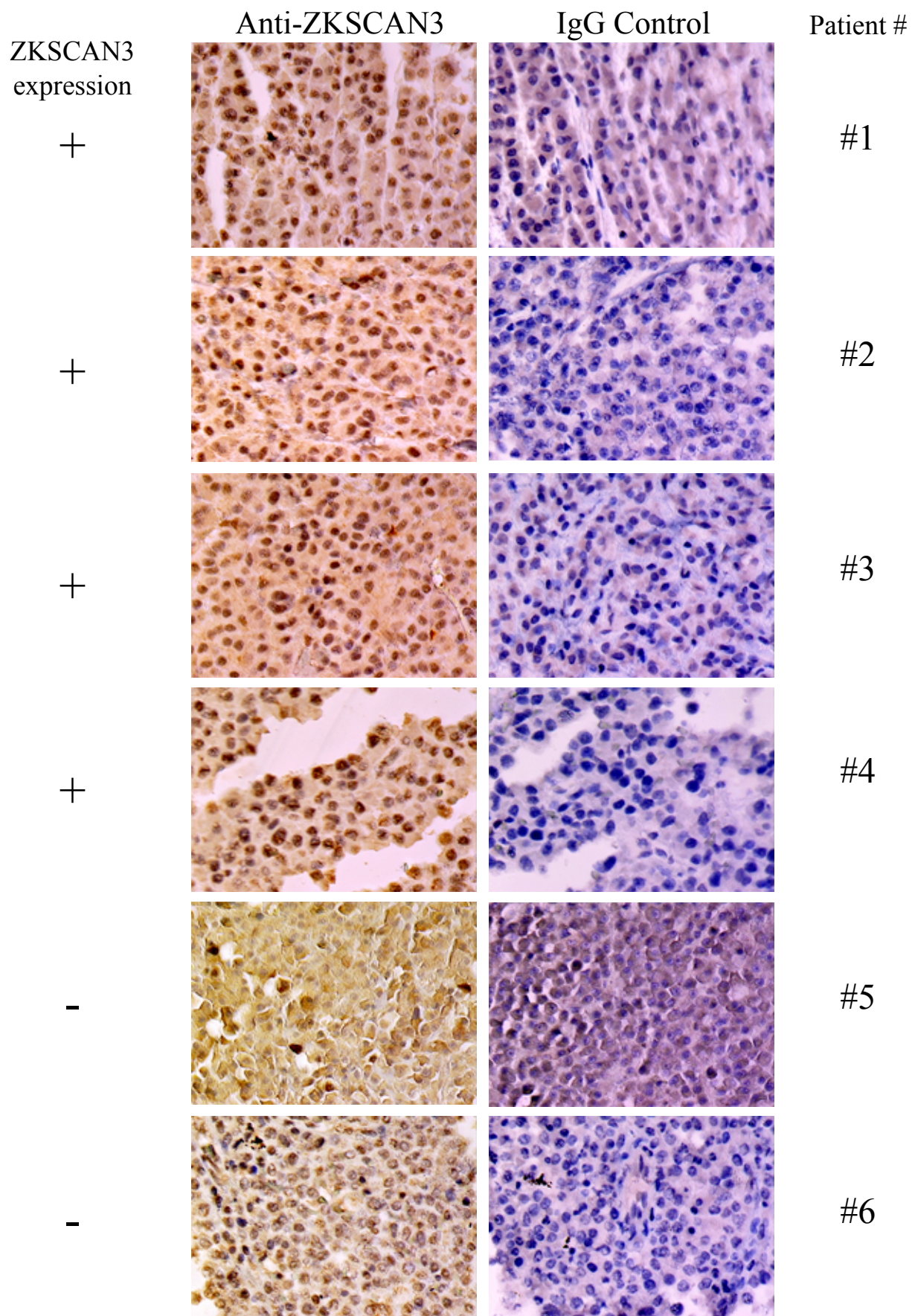


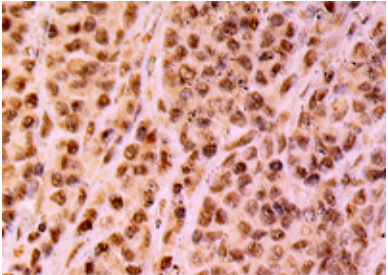
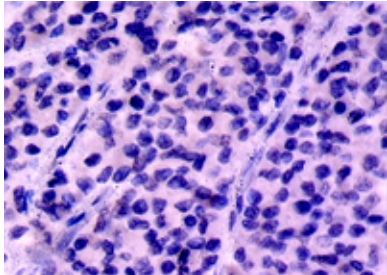
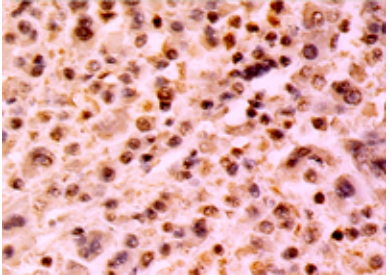
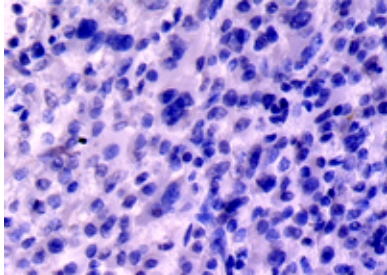
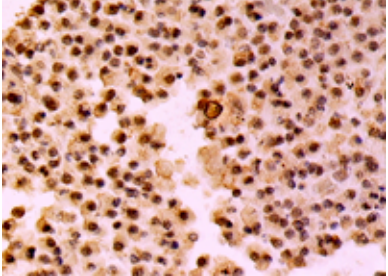
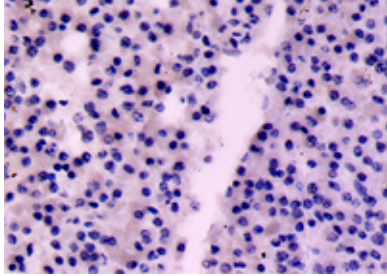
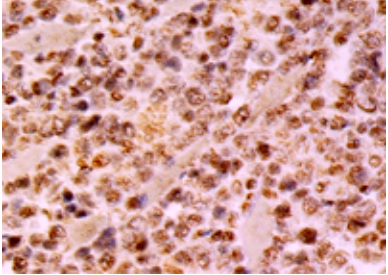
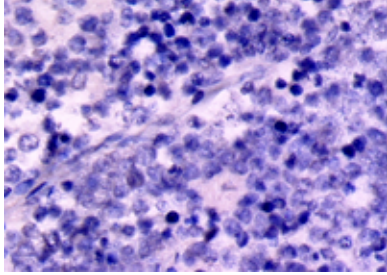
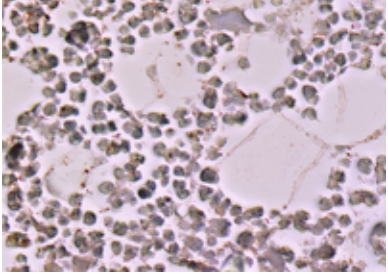
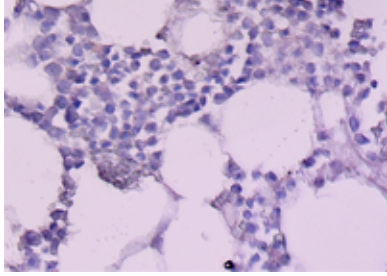
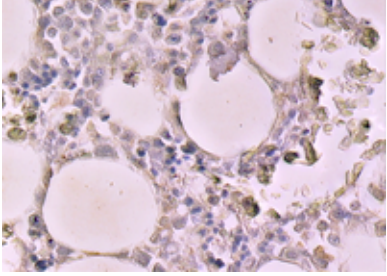
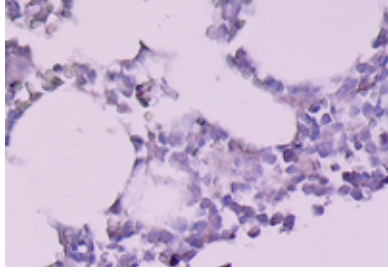
Supplementary Figure 1

ZKSCAN3 (ZNF306) ECgene Summary (<http://genome.ewha.ac.kr/ECgene/>)

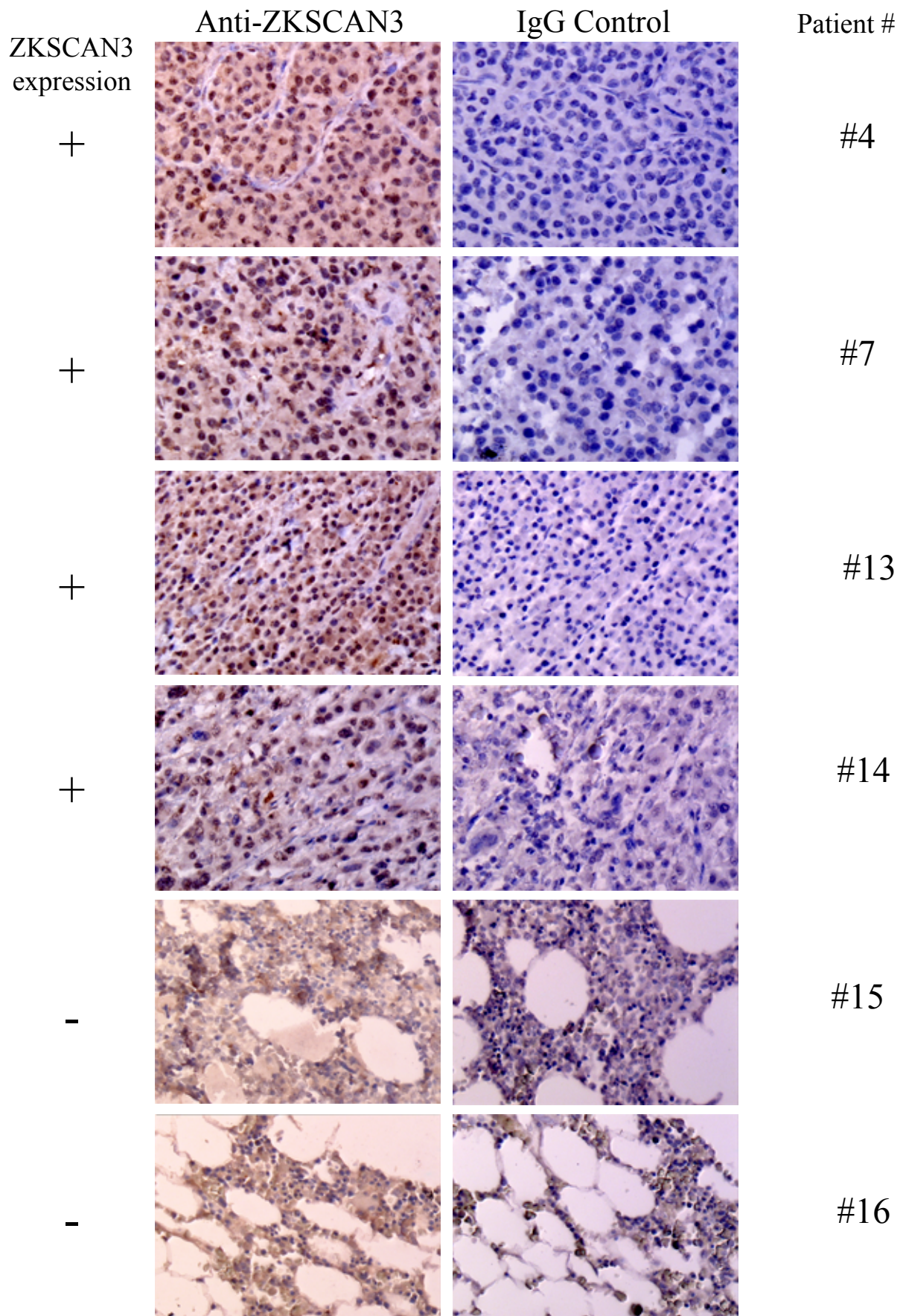


Supplementary Figure 2A

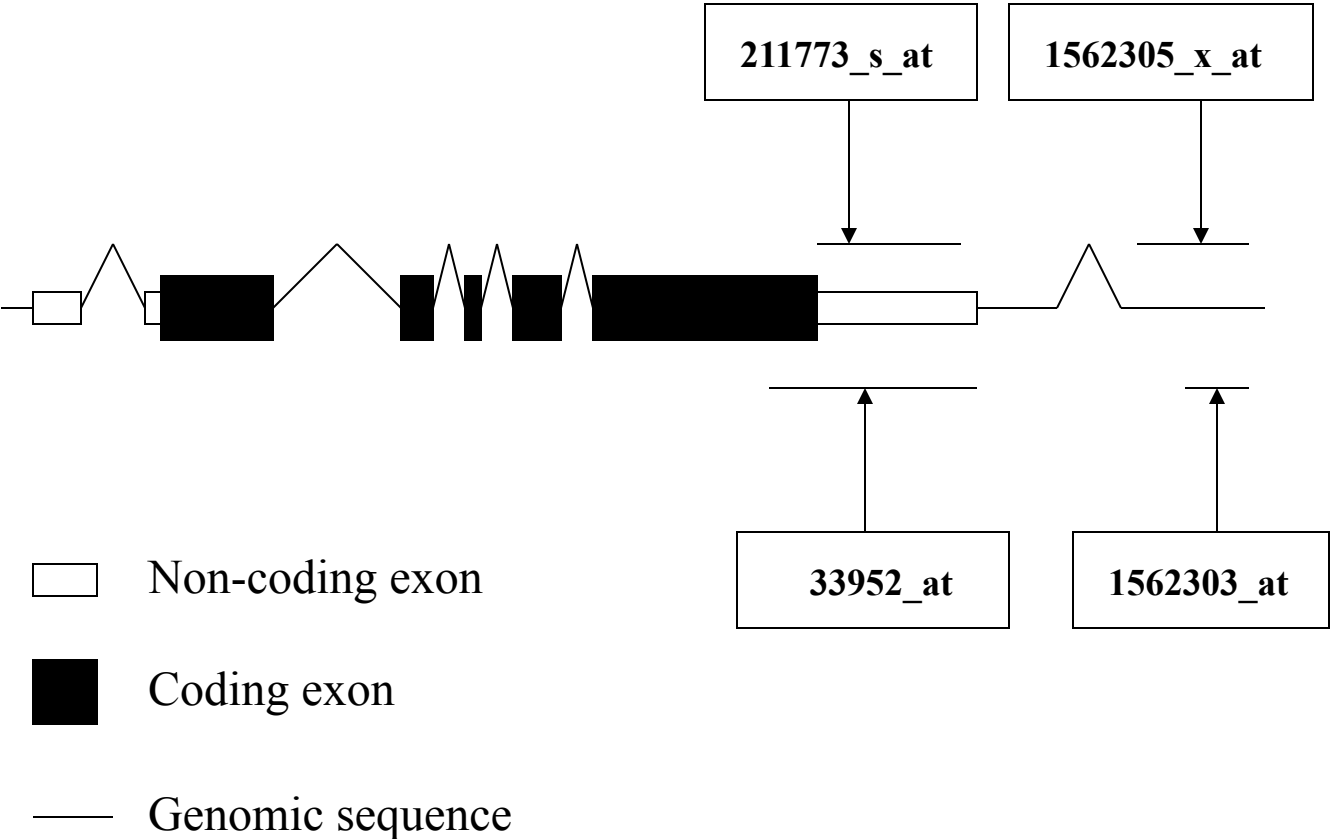


	Anti-ZKSCAN3	IgG Control	Patient #
ZKSCAN3 expression +			#7
+			#8
+			#9
+			#10
-			#11
-			#12

Supplementary Figure 2B



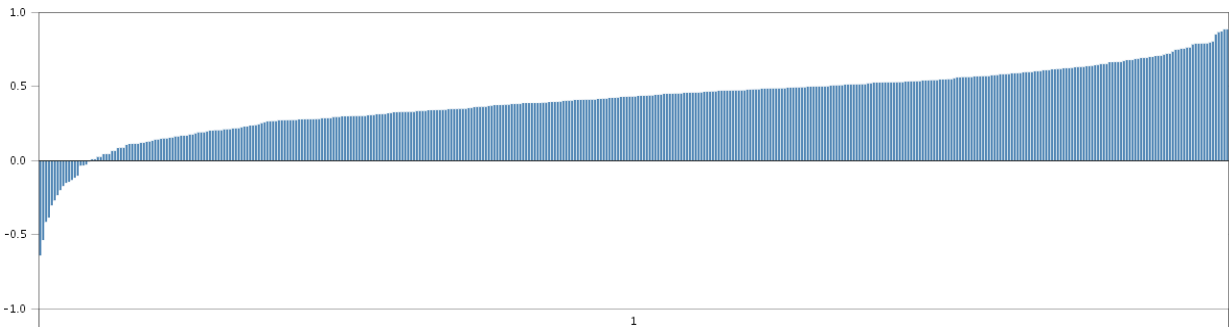
Supplementary Figure 3A



Supplementary Figure 3B

ZKSCAN3 Expression in Zhan Myeloma 2

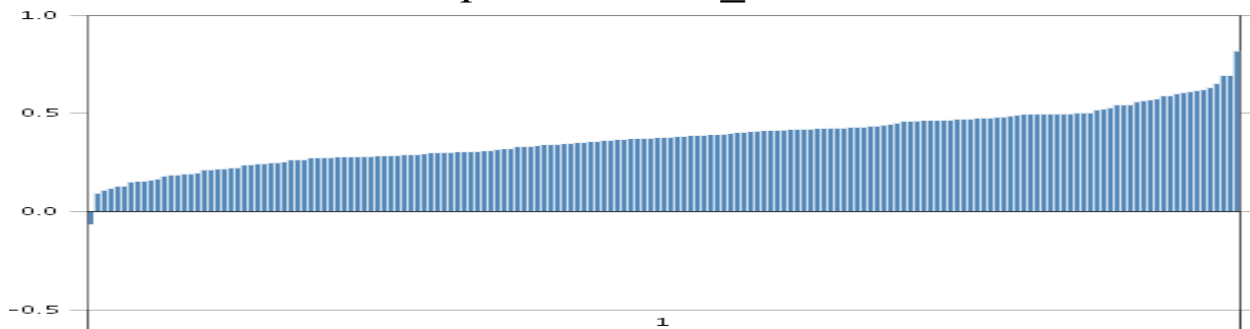
Reporter: 211773_s_at



Positive *ZKSCAN3* expression: 95.2% (394/414)

ZKSCAN3 Expression in Tian Myeloma

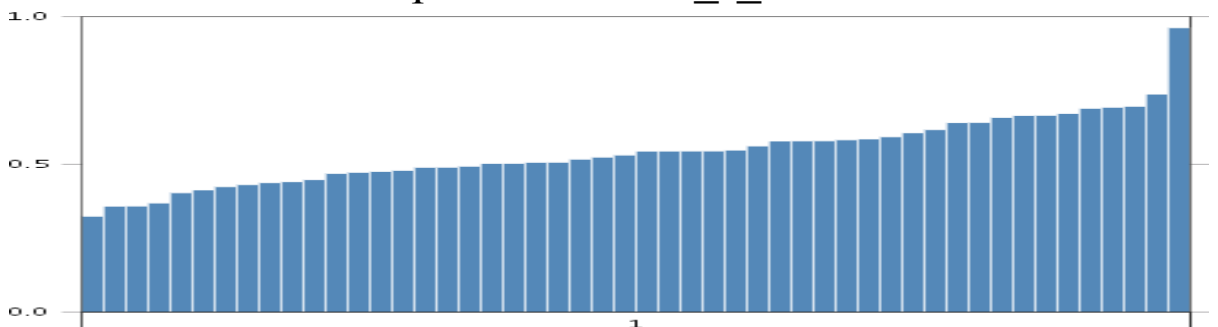
Reporter: 33952_at



Positive *ZKSCAN3* expression: 99.4% (172/173)

ZKSCAN3 Expression in Angelli Myeloma_1

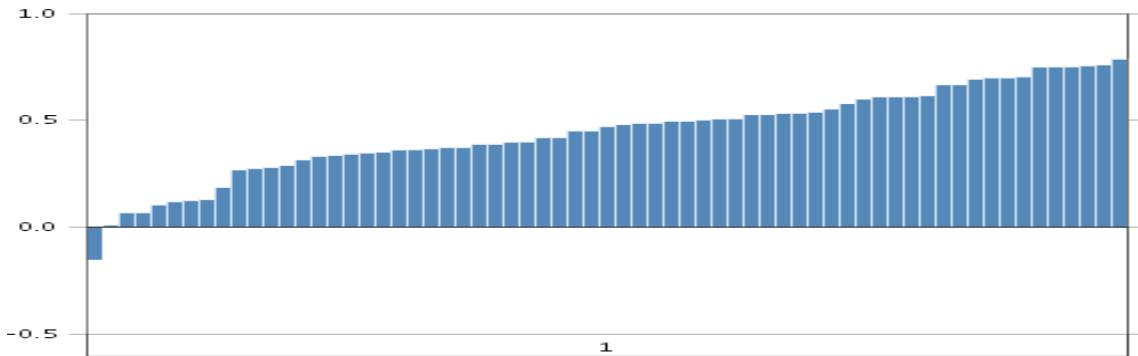
Reporter: 211773_s_at



Positive *ZKSCAN3* expression: 100% (50/50)

ZKSCAN3 Expression in Carrasco Myeloma

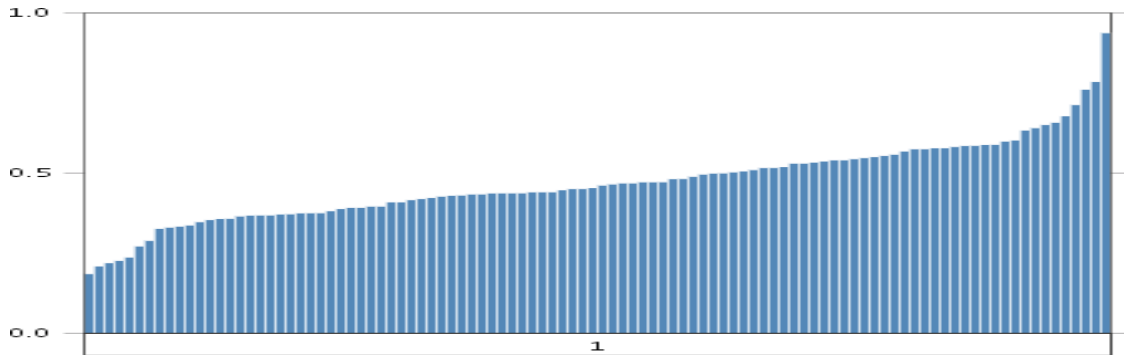
Reporter: 211773_s_at



Positive *ZKSCAN3* expression: 96.9% (63/65)

ZKSCAN3 Expression in Angelli Myeloma_2

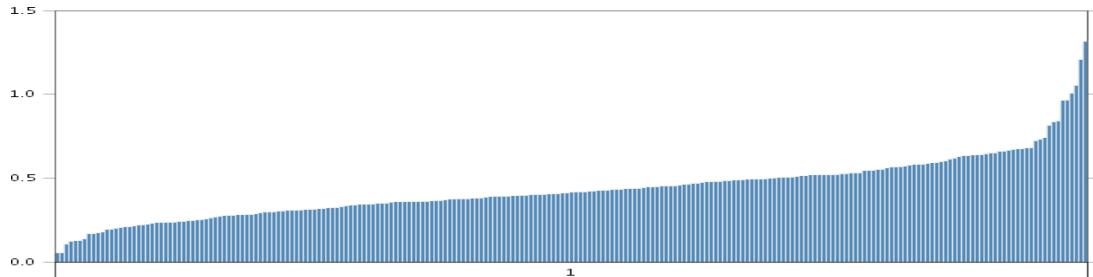
Reporter: 211773_s_at



Positive *ZKSCAN3* expression: 100% (102/102)

ZKSCAN3 Expression in Burington Myeloma

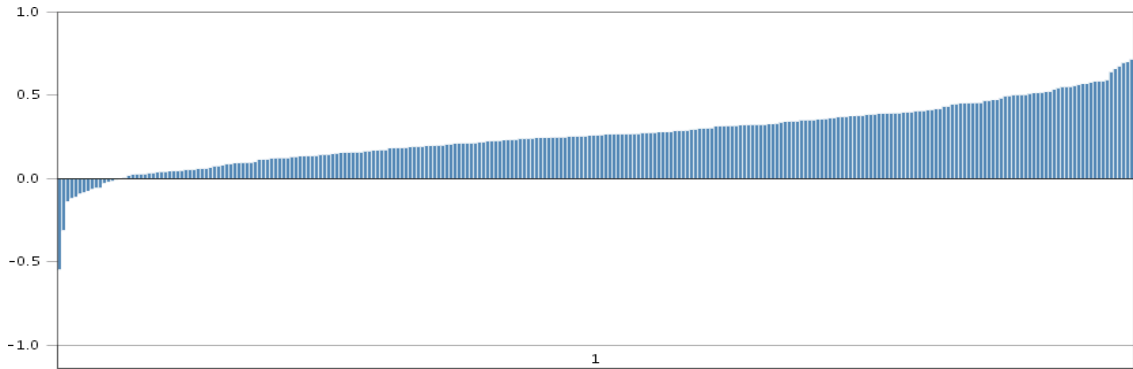
Reporter: 33952_at



Positive *ZKSCAN3* expression: 100% (229/229)

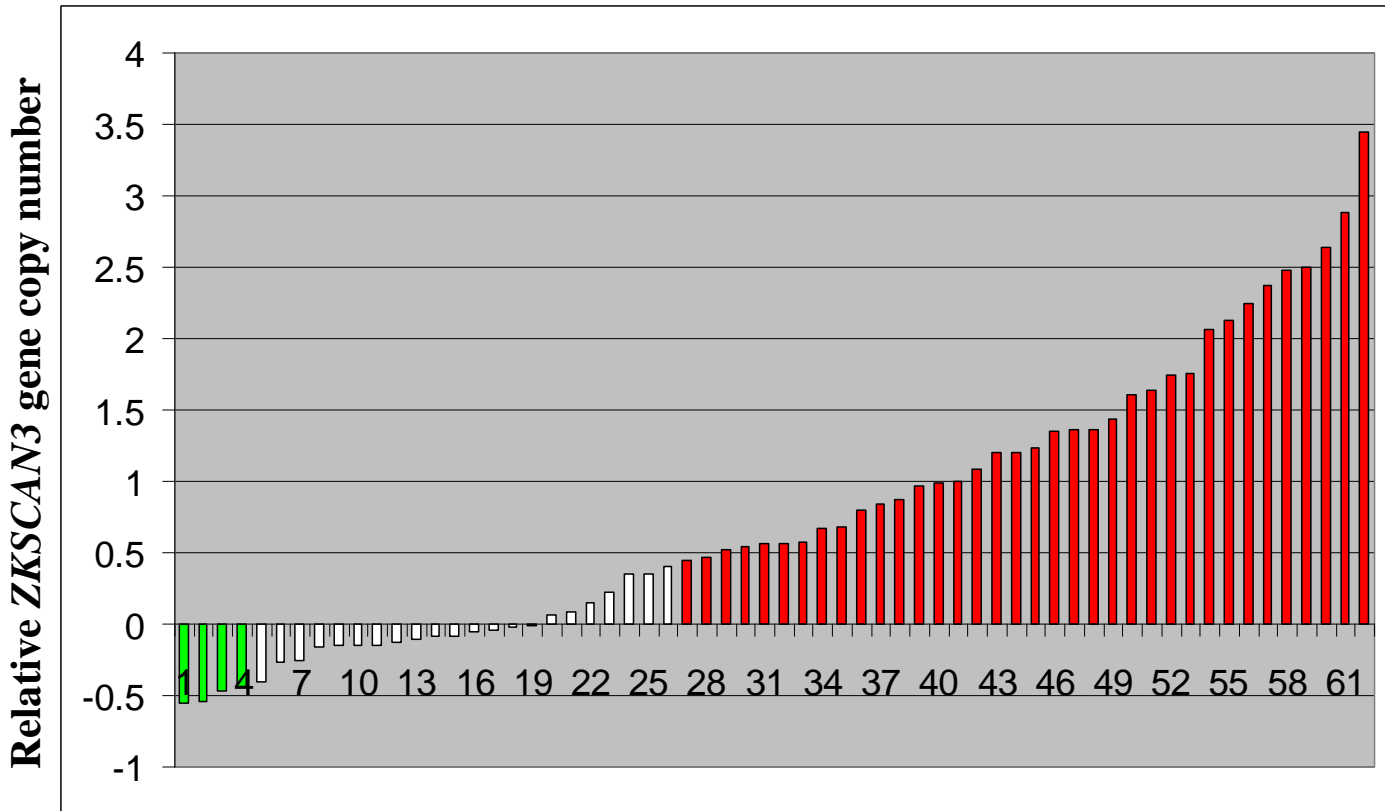
***ZKSCAN3* Expression in Mulligan Myeloma**

Reporter: 211773_s_at



Positive *ZKSCAN3* expression: 93.9% (248/264)

Supplementary Figure 4A

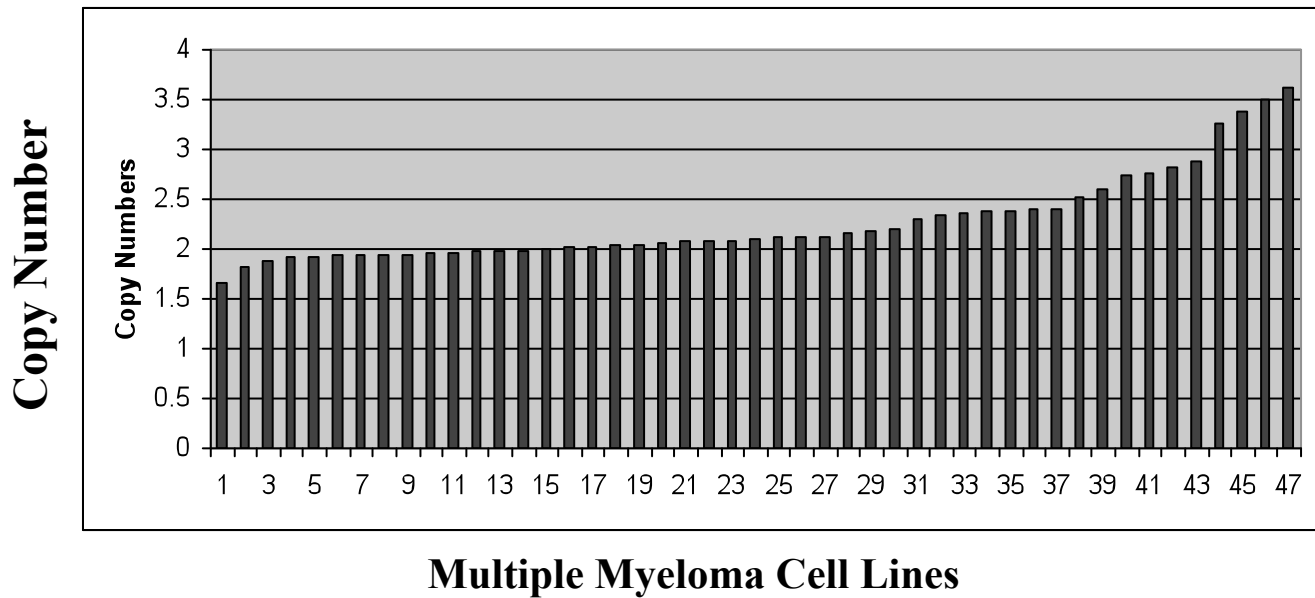


Green bar: copy number decrease

White bar: copy number no change

Red bar: copy number increase

Supplementary Figure 4B



6p22.1 Region Copy Number	Number of Cell Lines (total 47)	%
<1.0	0	0
1.0-1.5	0	0
1.5-2.0	14	29.8
2.0-2.5	23	48.9
2.5-3.0	6	12.8
>3.0	4	8.5

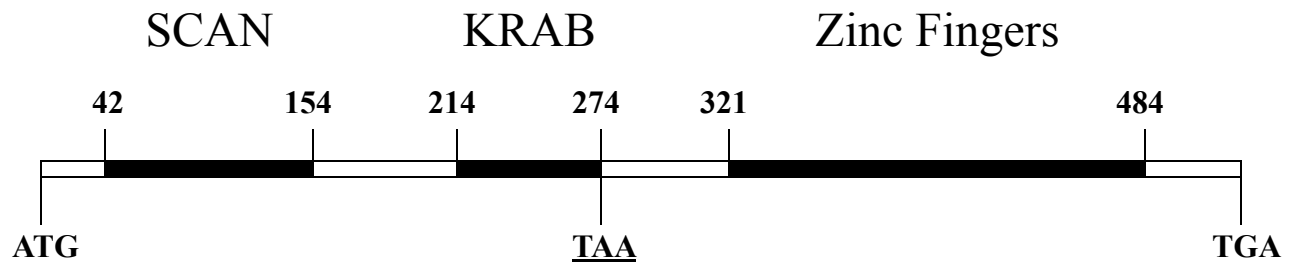
Note:

Cell line #47: RPMI 8226

Supplementary Figure 5B

Motif Location at Promoter	Sequence	DNA Strand
-482 to -495	AAATCACCCCCTCC	-
-677 to -690	AAGCACCCCCTTC	-
-1003 to -1016	GAAGGGGTGGTGGT	+

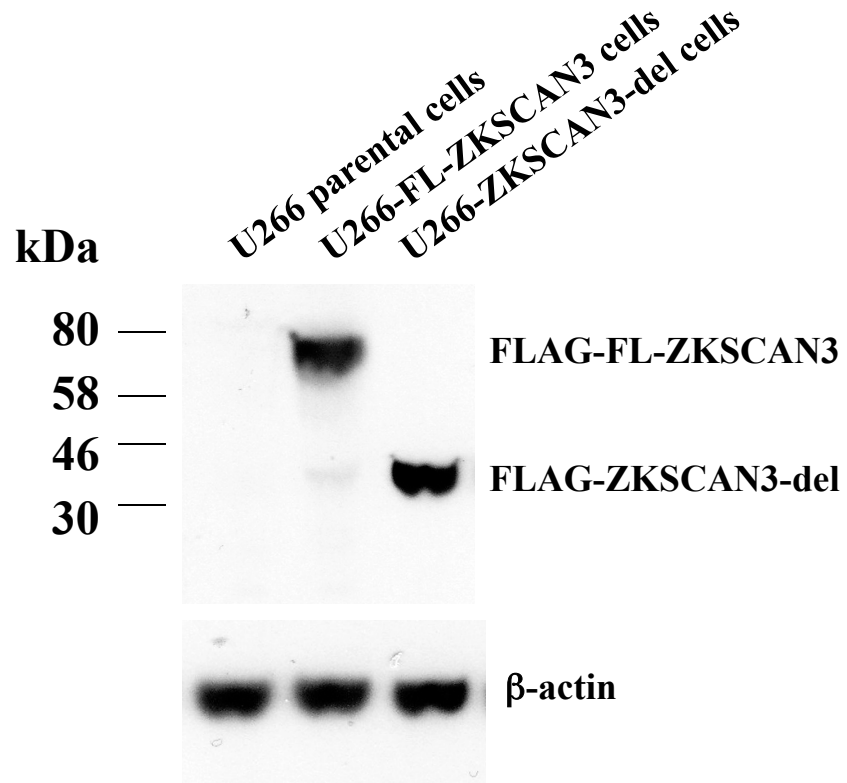
Supplementary Figure 6A



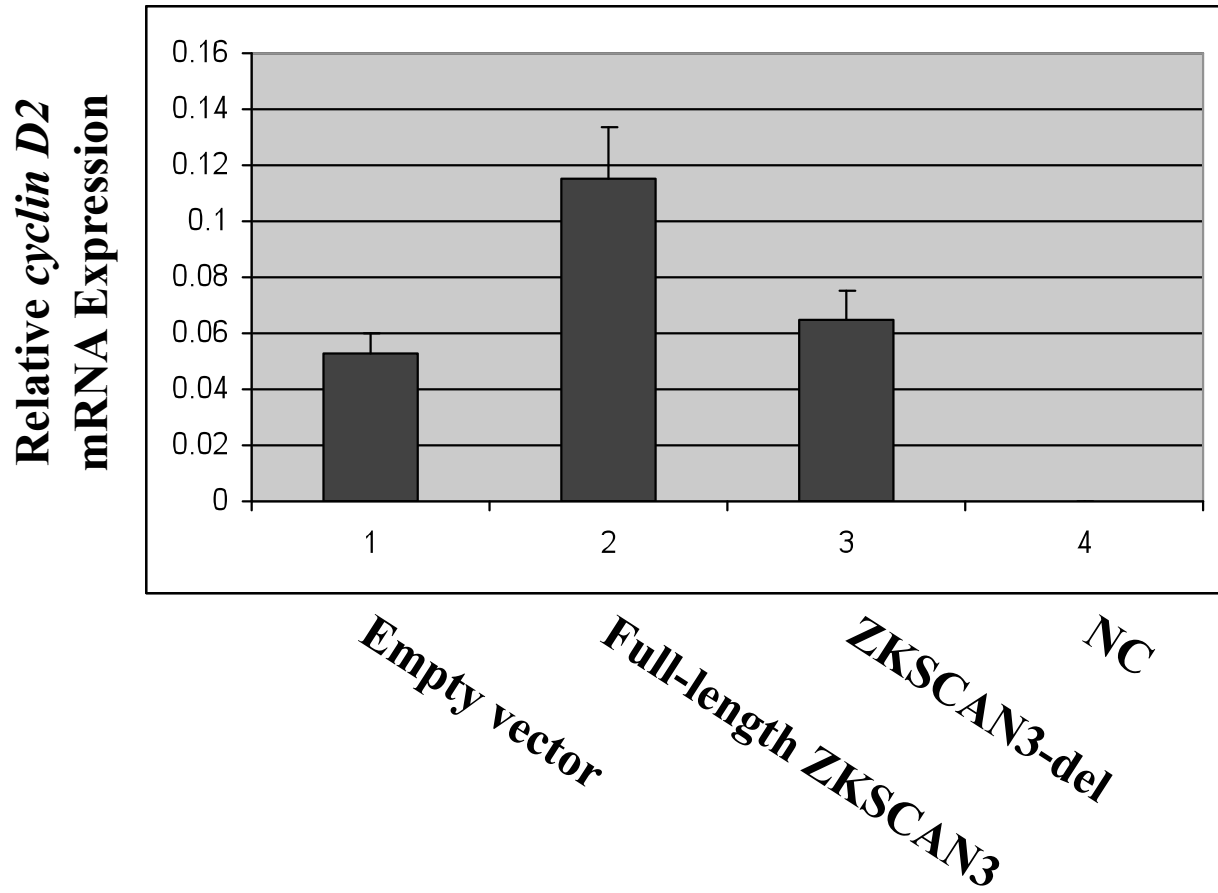
32.18 kDa (including FLAG)

62.17 kDa (including FLAG)

Supplementary Figure 6B

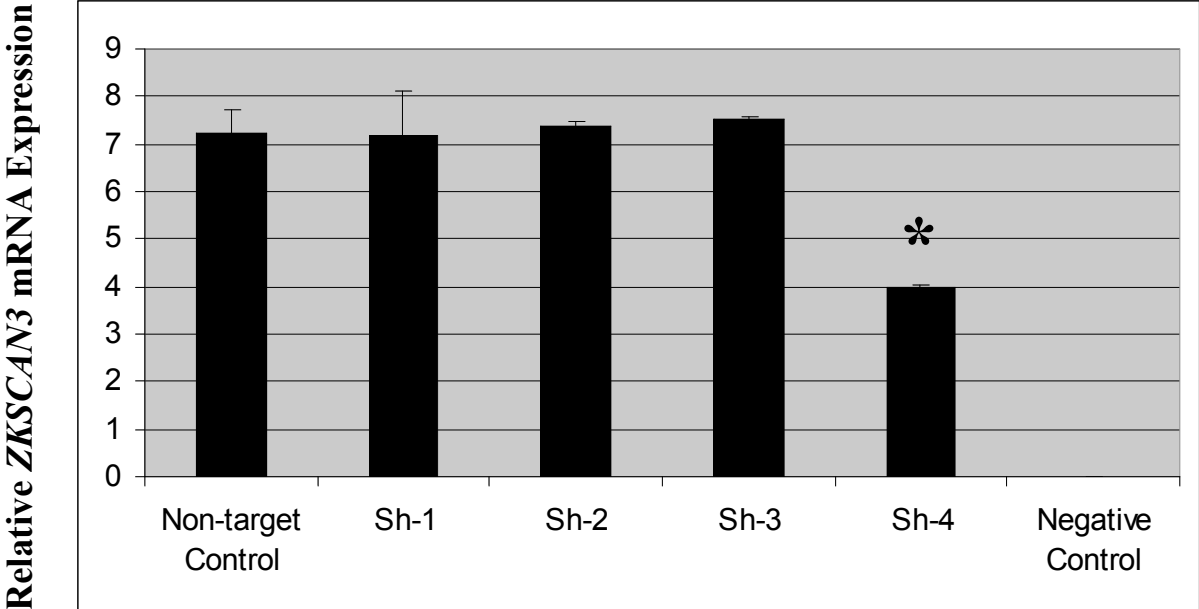


Supplementary Figure 6C

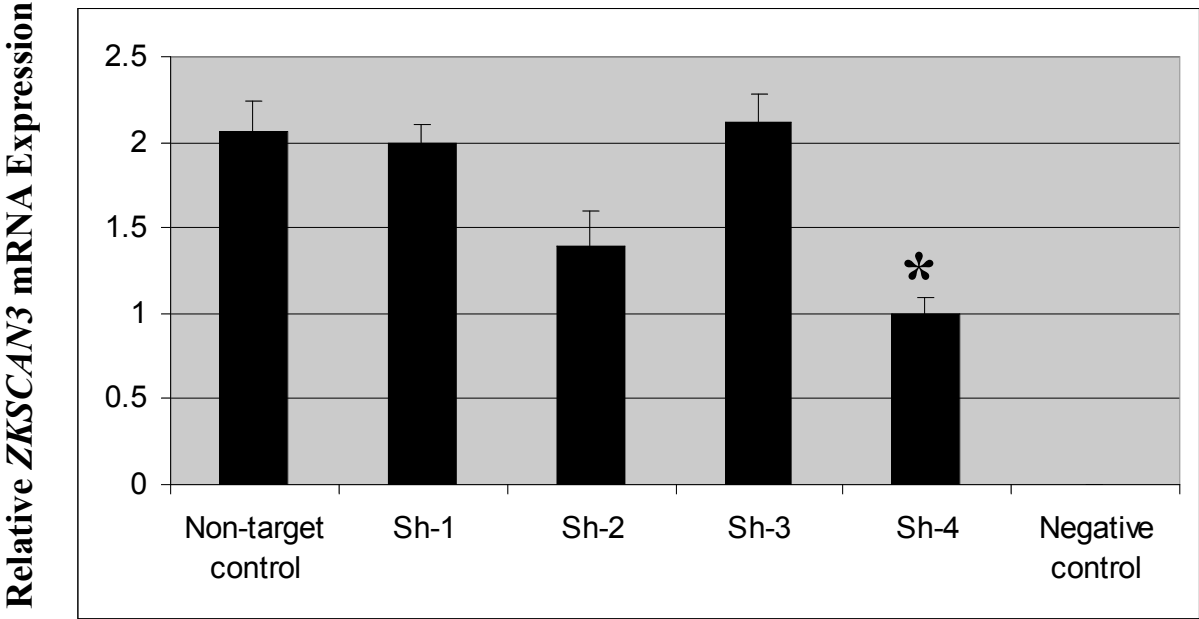


Supplementary Figure 7A

RPMI 8226

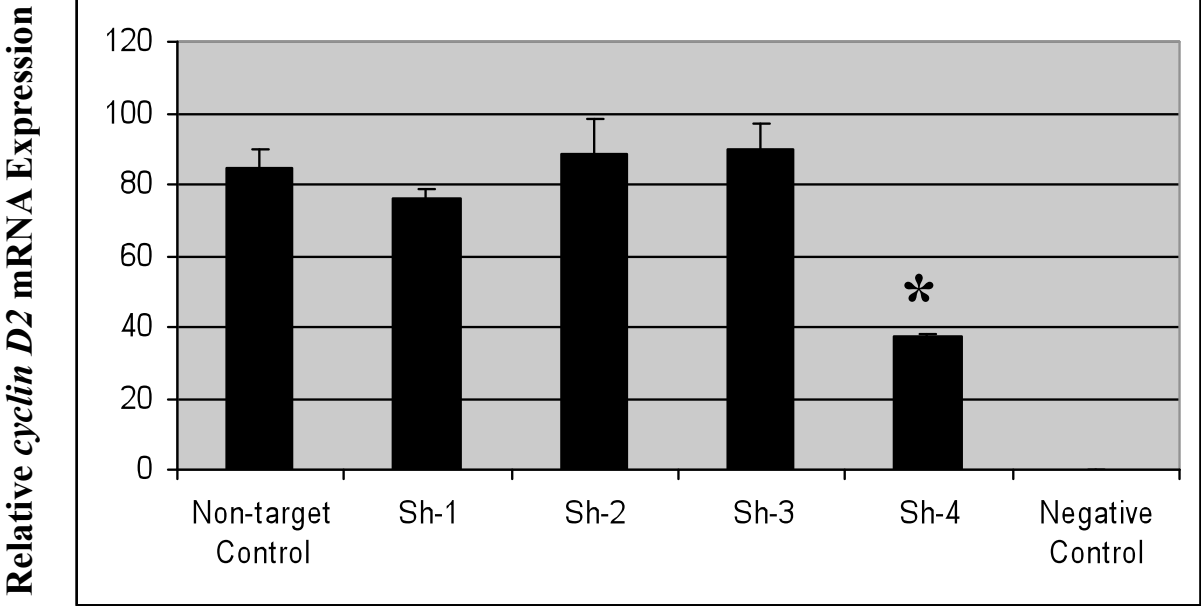


KAS-6/1

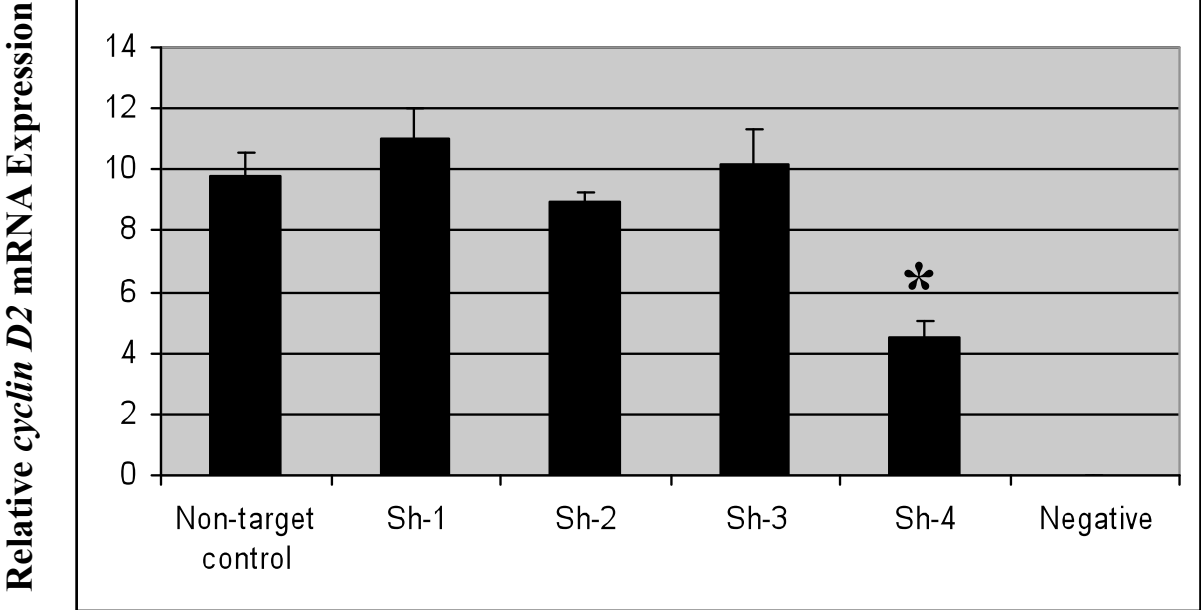


Supplementary Figure 7B

RPMI 8226

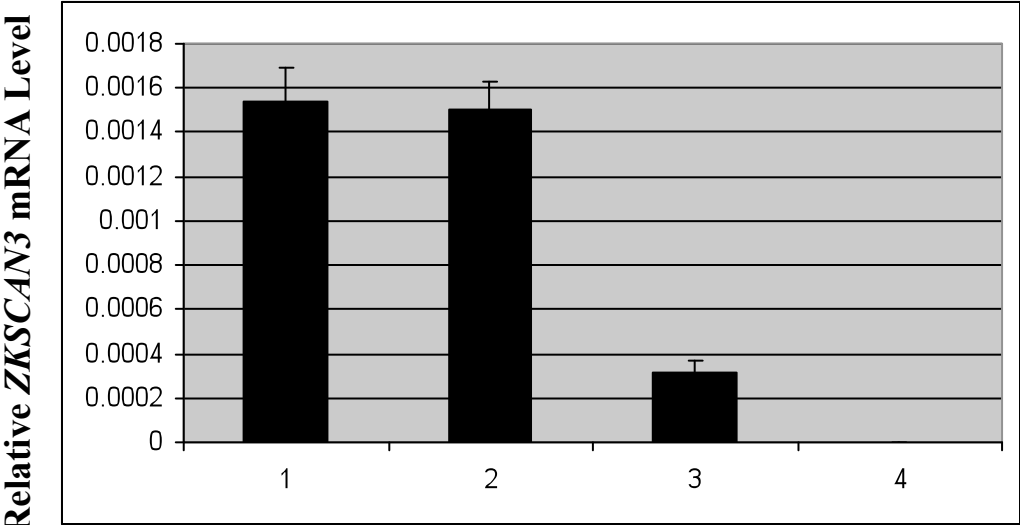


KAS-6/1



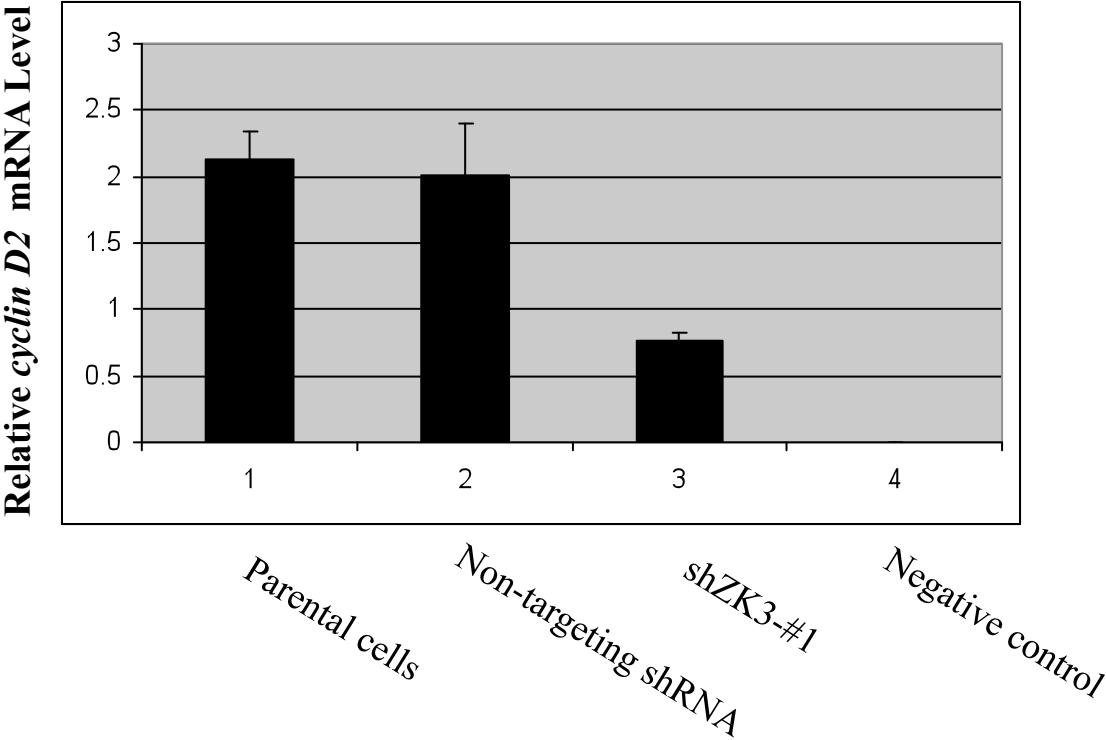
Supplementary Figure 7C

KAS-6/1 cells

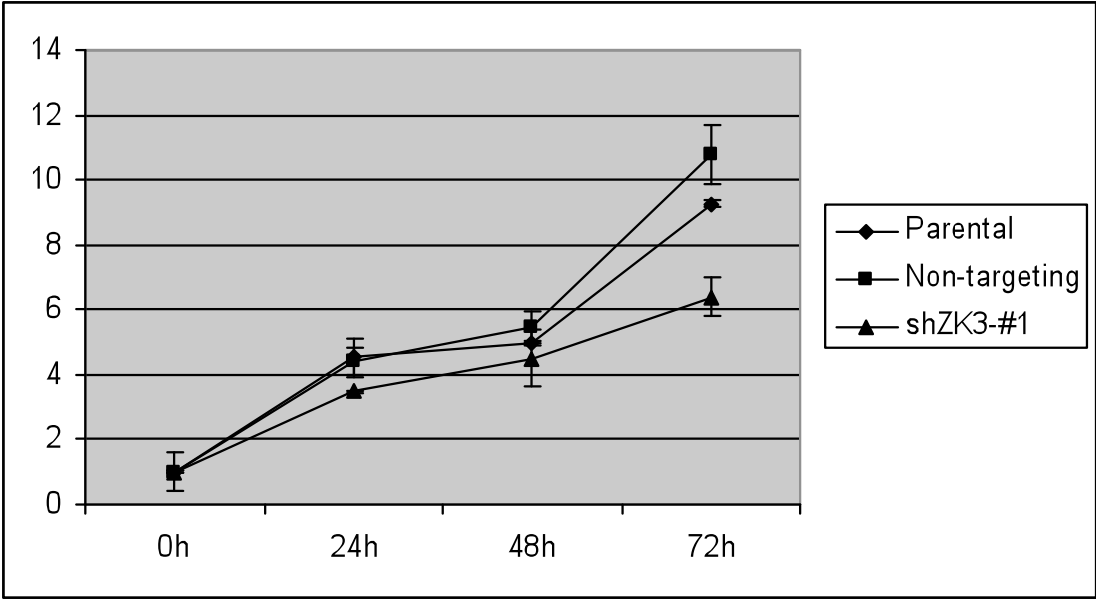


- 1. Parental cells
- 2. Non-targeting shRNA
- 3. shZK3-#1
- 4. Negative control

Supplementary Figure 7D



Supplementary Figure 7E



Probe A_14_P111649
PhysicalPosition 28327784
Chromosome 6p22.1
Representative Gene ZKSCAN3

Patient number	ZKSCAN3 copy number	Main mode of density plot	Relative gene copy number	Copy number change
MCR-0249_MM	1.384562013	1.942	-0.557437987	decrease
MCR-0134_MM	1.402044325	1.942	-0.539955675	decrease
MCR-0051_MM	1.470682176	1.942	-0.471317824	decrease
MCR-1263_MM	1.502511526	1.942	-0.439488474	decrease
MCR-0927_MM	1.536261401	1.942	-0.405738599	no change
MCR-0103_SMM	1.674827527	1.942	-0.267172473	no change
MCR-0142_MM	1.688927663	1.942	-0.253072337	no change
MCR-0250_MM	1.785295197	1.942	-0.156704803	no change
MCR-0200_MM	1.788593815	1.942	-0.153406185	no change
MCR-0203_MM	1.790927196	1.942	-0.151072804	no change
MCR-0288_MM	1.797366022	1.942	-0.144633978	no change
MCR-1105_MM	1.809504312	1.942	-0.132495688	no change
MCR-0882_MM	1.837968005	1.942	-0.104031995	no change
MCR-0087_SMM	1.852484206	1.942	-0.089515794	no change
MCR-0157_MM	1.862047477	1.942	-0.079952523	no change
MCR-0198_MM	1.884232845	1.942	-0.057767155	no change
MCR-0263_MM	1.898546888	1.942	-0.043453112	no change
MCR-0073_MM	1.922690858	1.942	-0.019309142	no change
MCR-0245_MM	1.934945523	1.942	-0.007054477	no change
MCR-0061_MM	2.008417942	1.942	0.066417942	no change
MCR-0892_MM	2.03057562	1.942	0.08857562	no change
MCR-0113_MM	2.08665026	1.942	0.14465026	no change
MCR-0318_MM	2.168874437	1.942	0.226874437	no change
MCR-0307_MM	2.29447363	1.942	0.35247363	no change
MCR-0899_MM	2.295065042	1.942	0.353065042	no change
MCR-0912_MM	2.35087693	1.942	0.40887693	no change
MCR-1039_MM	2.386699629	1.942	0.444699629	increase
MCR-0904_MM	2.415081936	1.942	0.473081936	increase
MCR-0433_MM	2.465220486	1.942	0.523220486	increase
MCR-0822_MM	2.487342243	1.942	0.545342243	increase
MCR-0994_MM	2.502903358	1.942	0.560903358	increase

MCR-1136_MM	2.507513396	1.942	0.565513396	increase
MCR-0264_MM	2.511916001	1.942	0.569916001	increase
MCR-0417_SMM	2.609840031	1.942	0.667840031	increase
MCR-1035_MM	2.627941096	1.942	0.685941096	increase
MCR-1194_MM	2.736373632	1.942	0.794373632	increase
MCR-0940_SMM	2.786018861	1.942	0.844018861	increase
MCR-0427_MM	2.812295366	1.942	0.870295366	increase
MCR-0400_SMM	2.910554393	1.942	0.968554393	increase
MCR-0217_MM	2.927767261	1.942	0.985767261	increase
MCR-1055_MM	2.941083467	1.942	0.999083467	increase
MCR-0390_MM	3.026995818	1.942	1.084995818	increase
MCR-1215_MM	3.143457533	1.942	1.201457533	increase
MCR-0297_MM	3.149211937	1.942	1.207211937	increase
MCR-1098_MM	3.179854359	1.942	1.237854359	increase
MCR-0059_MM	3.292730179	1.942	1.350730179	increase
MCR-0959_MM	3.299421355	1.942	1.357421355	increase
MCR-0999_MM	3.302930876	1.942	1.360930876	increase
MCR-1000_MM	3.382878795	1.942	1.440878795	increase
MCR-1082_MM	3.552691257	1.942	1.610691257	increase
MCR-1028_MM	3.581263728	1.942	1.639263728	increase
MCR-1026_MM	3.691344061	1.942	1.749344061	increase
MCR-1273_MM	3.694252144	1.942	1.752252144	increase
MCR-1144_SMM	4.001606971	1.942	2.059606971	increase
MCR-0890_MM	4.07091863	1.942	2.12891863	increase
MCR-0373_MM	4.186848403	1.942	2.244848403	increase
MCR-1092_MM	4.315784522	1.942	2.373784522	increase
MCR-1183_SMM	4.419538189	1.942	2.477538189	increase
MCR-0426_SMM	4.44101302	1.942	2.49901302	increase
MCR-1190_MM	4.57752057	1.942	2.63552057	increase
MCR-1189_MM	4.829075411	1.942	2.887075411	increase
MCR-0319_SMM	5.394019444	1.942	3.452019444	increase

	Cell Line	Chromosome	Start.bp	End.bp	Seg.CN
1	KHM11	6	8007797	117884012	1.660522869
2	JK6L	6	204528	109282106	1.816313481
3	FR4	6	204528	170809875	1.888671408
4	OPM2	6	204528	32047749	1.918808353
5	MM_M1	6	204528	170809875	1.923931494
6	KMS34	6	204528	87782433	1.933963838
7	KMS11	6	204528	30737615	1.944024931
8	L363	6	204528	76400079	1.944645479
9	XG2	6	204528	46671760	1.947078177
10	OCIMY1	6	204528	96591731	1.969085072
11	NCIH929	6	204528	160083897	1.96928338
12	MM1R	6	204528	30227680	1.978377205
13	INA6	6	204528	94008139	1.979314171
14	OCIMY5	6	204528	109827926	1.987321362
15	CAG	6	204528	62040890	2.009172573
16	XG1	6	204528	32905664	2.010145489
17	U266	6	204528	94085300	2.015657528
18	DELTA47	6	4756355	36761482	2.043173731
19	KARPAS620	6	204528	170809875	2.049591211
20	SKMM1	6	204528	85037370	2.06552464
21	ANBL6	6	204528	54055870	2.072858015
22	KMS28PE	6	204528	119414707	2.083871984
23	MM1S	6	204528	54162600	2.085580713
24	KMS12BM	6	28218866	45181689	2.098015736
25	FLAM76	6	204528	170809875	2.116358261
26	OCIMY7	6	945019	39969922	2.119718782
27	SKMM2	6	204528	93398769	2.120876503
28	UTMC2	6	204528	30021894	2.154301246
29	KMS12PE	6	1799987	170809875	2.182346833
30	KMS28BM	6	204528	63255895	2.203281379
31	KMS26	6	204528	49927967	2.293619683
32	PE2	6	204528	170809875	2.335780078
33	KMS20	6	21306265	44079986	2.359292504
34	KMS18	6	26203196	44523059	2.370570578
35	JJN3	6	14086214	31739156	2.370704893
35	OPM1	6	204528	31652497	2.401546858
37	LP1	6	945019	75949831	2.405989538
38	SACHI	6	204528	76607743	2.527941812
39	XG6	6	22396956	43604720	2.591810555
40	JIM3	6	7340313	58721961	2.739265804
41	PE1	6	204528	42669962	2.76863423
42	ARP1	6	26342645	29866766	2.815265862
43	H1112	6	204528	57838399	2.882678789
44	KHM1B	6	24106527	43702997	3.254735582
45	KMM1	6	26125251	35211613	3.374869881
46	EJM	6	204528	30805992	3.507362684
47	RPMI8226	6	20954331	31611211	3.610380956