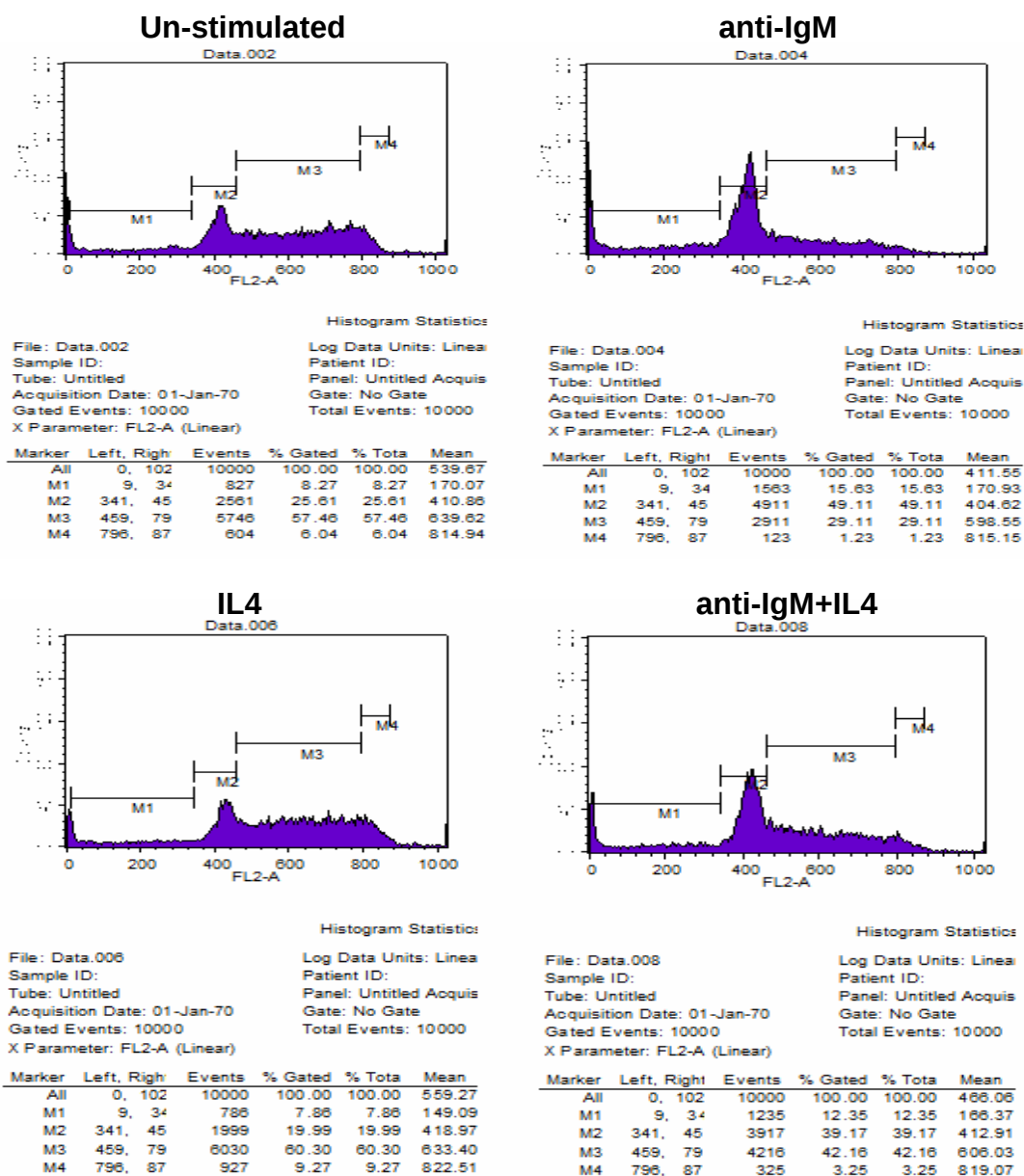
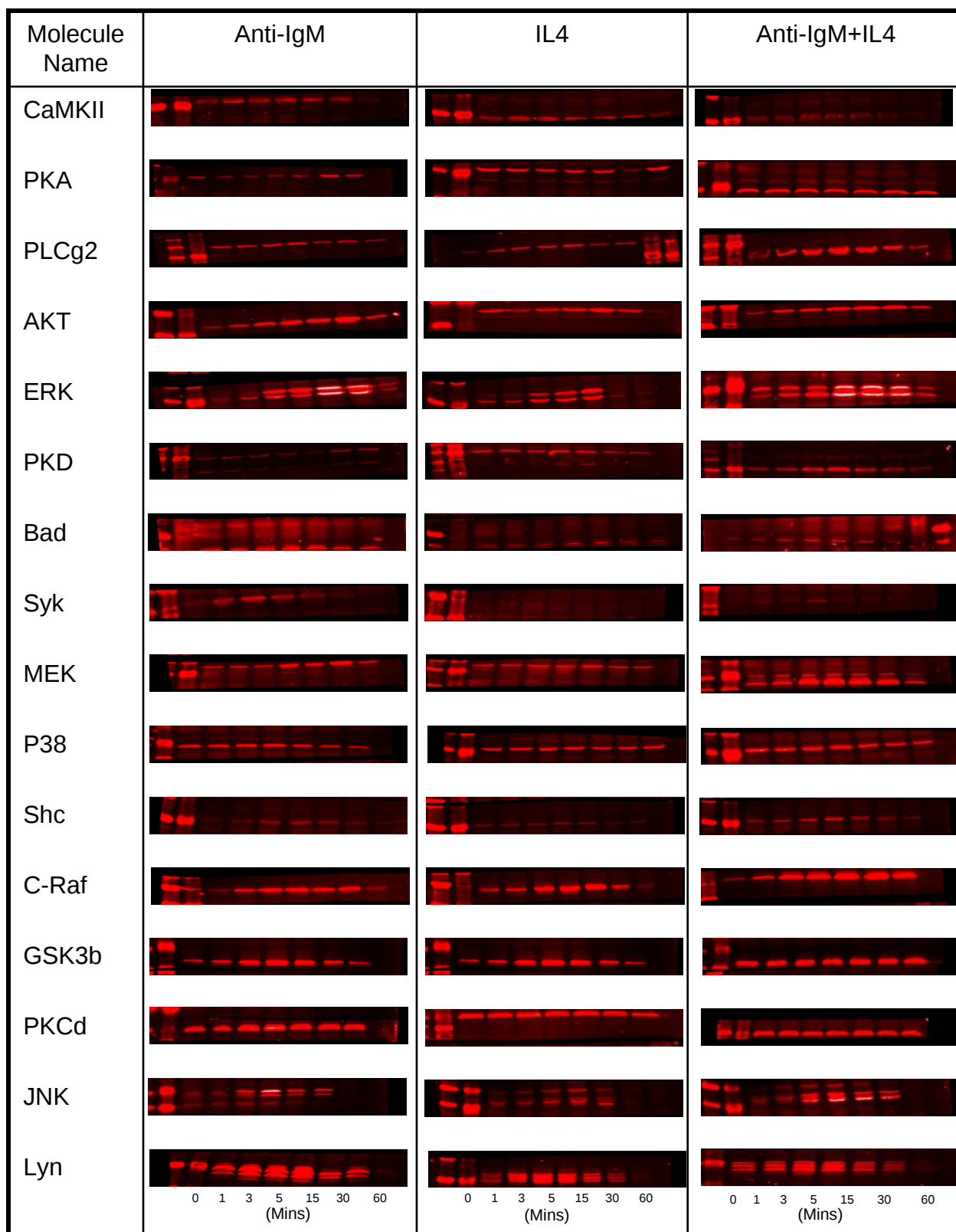


Supplementary Figure 1

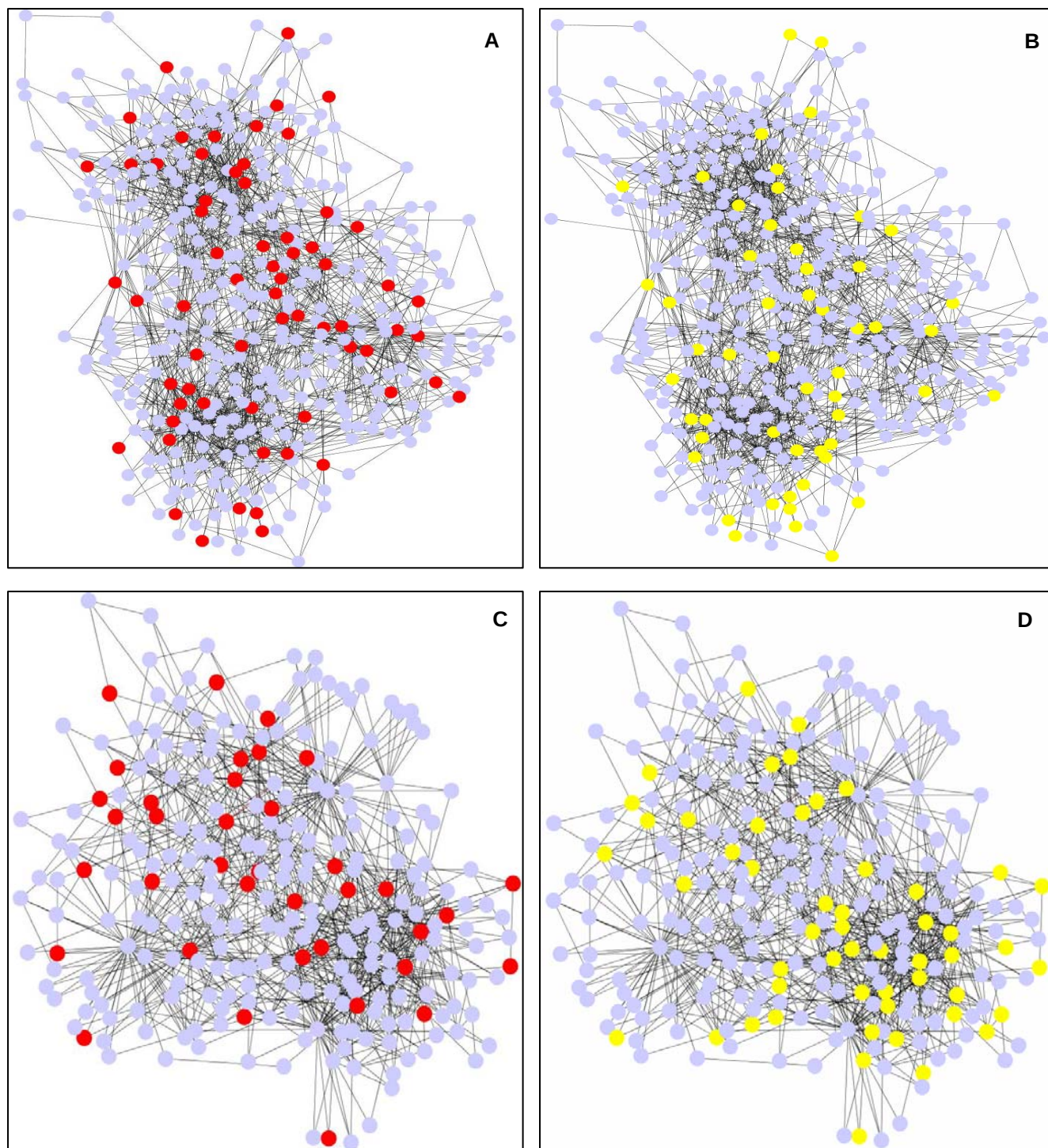


CH1 Cells were plated in the wells of a 96-well plate and stimulated either with anti-IgM, IL4, or a combination of both. At 16 h later, the cells were harvested and stained with Propidium Iodide for analysis by flow cytometry. M1,M2,M3 and M4 represent apoptotic cells, G0/G1, S and G2/M phases respectively. The extent of cell cycle arrest was determined by measuring the relative proportion of cells in the G0/G1, versus the S and G2/M phases in each of the experimental groups.

Supplementary Figure 2



Supplementary Figure 3



The extracted PPI networks for anti-IgM (networks A and B) and anti-IgM+IL4 (networks C and D) stimulation conditions. Highlighted in red (pro-apoptotic classes) and yellow are those (pro-survival classes) shortlisted nodes according to their contribution to either apoptosis or proliferation classified according to Gene Ontology.

Supplementary Table:- List of the Transcription Factors and their respective values obtained from Transcription factor activation array

Name of TF	Control	Anti-IgM 15'	Anti-IgM 30'	IL4 15'	IL4 30'	Anti-IgM + IL4 15'	Anti-IgM + IL4 30'
AP1	0.59	0.06	0	0	0	0	0
AP2	17.14	60.12	0	0	0	0	0
AR	254.96	79.77	0.4	1.17	0	0	0
Bm3	0.2	52.87	0	0	0	0	0
C/EBP(a,b and others)	54.73	55.31	0.19	0	0	0	0
CBF	193.24	444.86	104.4	129.1	0	0.65	69.89
CDP	215.09	106.95	0	1.56	0	0	0
c-Myb	244.32	186.39	0	1.06	0	0	0
CREB	174.49	276.68	0	26.07	12.8	0	4.61
E2F-1	537.67	520.29	212.64	132.82	139.27	30.92	192.05
EGR	727.26	952.37	415.23	320.11	325.53	135.77	352.38
ERE	368.44	173.68	2.09	0.09	66.03	0	5.02
ETS	350.74	296.53	58.4	50.17	106.69	0	28.57
Ets/PEA3	0	5.51	0	0	0	0	-1.39
FAST-1	283.61	-75.32	0	2.46	-14.87	0	18.75
GAS/ISRE	2.19	57.47	0	0.03	0	0	0
GATA	82.04	45.18	0	0	0	0	0
GR/PR	469.73	478	155.66	109.21	29.7	0	0.32
IRF1	0.7	0	0.02	0	0	0	0
MEF-1	281.81	394.73	75.06	-0.43	0	0	19.64
MEF2	265.52	347.89	85.05	31.16	0	0	46.71
Myc/Max	12.61	85.07	0	0.22	0	0	0
NF-1	214.57	125.22	0	0	0	0	0
NFATc	372.52	144.9	0	0.21	0	0	1.47
NF-E1(YY1)	932.77	831.83	507.39	280.18	330.17	141.99	391.5
NF-E2	344.02	440.16	20.9	0.23	3.27	0	63.62
NFKB	153.26	327.42	1.07	0	2.67	0	17.64
Oct1	1.8	0	0	0	0	0	0

p53	165.23	96.88	0.01	0	0	0	-0.14
Pax-5	78.27	540.86	229.62	87.2	126.37	0.56	252.96
Pbx1	32.19	59.53	0	-1.23	0	0	0
Pit 1	152.3	188.76	1.98	0	0	0	0
PPAR	320.72	274.97	64.81	8.11	0	0	0.15
PRE	1.28	24.64	0.26	0	0	0	0
RAR/DR-5	140.21	160.6	0	0	0	0	0
RXR/DR-1	11.6	10.16	0	0	0	0	0
SIE	238.84	109.21	0	0	0	0	0
Smad SBE	0.6	0	0	0	0	0	0
Smad 3/4	75.56	-38.92	0	0	0	0	0
Sp-1	712.5	826.85	489.95	330.51	316.51	107.26	307.55
SRE	0	-7.34	0	0	0	0	0
Stat1(p84/p91)	269.25	195.87	0	0	0	0	0.29
Stat3	152.21	598.75	175.17	-7.28	12.46	0	46.83
Stat4	270.66	82.48	0	0	0	0	0
Stat5	108.45	-98.54	0	0	-11.09	0	0
Stat5/6	205.4	149.96	0	0.77	0	0	0
TFIID	34.03	119.4	0	0	0	0	0
TR	10.65	4.58	0	0	0	0	0
TR(DR-4)	244.83	223.11	37.03	0	0	0	0
USF-1	268.7	270.9	28.9	0	0	0	8.96
VDR(DR-3)	287.38	153.36	5.59	0	0.1	0	0.55
HSE	430.21	107.15	-31.64	0	0	0	0
MRE	304.63	83.14	0	0	0	0	0
ADR-1	286.11	168.81	26.05	0	0	0	14.94
AhR/Amt	1157.24	945.25	698.63	385.69	546.27	197.4	589.64
Angitensinogen ANG-IRE	0	0.17	-1.63	0	0	0	0
Antioxidant RE	591.16	802.91	313.27	139.3	256.18	72.14	248.8
AP-3	229.6	613.25	112.24	-13.2	0	0	30.81

AP-4	67.02	104.78	0	0	0	0	0
Beta- RE	550.47	300.02	66.94	0	-24.43	0	13.48
Cdx/NKX2	0	0	0	0	0	0	0
CEF1	0.05	-8.2	0	0	0	0	0
CEF2	469.71	446.75	320.36	226.16	162.42	92.3	200.7
CETP-CRE	110.08	0	0	0	0.19	0	0
COUP-TF	278.21	35.29	0.56	0	0	0.04	0
CREB-BP1	0	0	0	0	3.27	0	0
c-Rel	787.58	482.21	570.67	293.52	417.16	194.86	441.6
E47	782.71	496.54	435.62	191.14	298.59	98.41	362.57
E4BP4	516.35	1.9	-64.58	0	0	0	0
E4F, ATF	158.52	-9.87	0	0	0	0	0
Elk1	482.08	101.51	0	0	0.01	0	7.65
EVI-1	242.86	11.93	0	-25.41	0	0	0
FKHR	0	0	0	0	0	0	0.26
Fkhr	147.79	168.64	0	0	0	0	17.93
Afxh(Foxo4)	77.3	-19.39	-28.8	0	-42.08	0	1.76
Freac-2(1)	-115.36	4.91	-30.37	-18.76	-11.8	0	-19.76
Freac-2(2)	354.95	300.43	176.23	41.88	92.33	13.98	13.41
Freac-4	129.69	37.99	9.64	-75.88	0	0	0
Freac-7	0	0	0	0	0	0	0
GAG	580.57	244.76	193.23	111.85	131.25	0	178.29
GAS	0	0	0	0.1	0.82	0	0
GATA-1	640.09	320.3	383.81	218.24	277.54	78.36	346.02
GATA-1/2	768.34	532.27	545.2	320.12	393.11	170.84	487.86
GATA-2	859.31	535.55	592.83	394.34	667.56	192.04	668.24
GATA-3	48.05	0	0	0	0	0	0
GATA-4	148.48	0	0	0	0	0	0
GATA-6	367.67	168.04	0	0	0	0	19.09
Gfi-1	19.23	95.71	0	0	0	0	-0.79

HFH-1	584.08	662.55	278.76	212.53	441.85	28.16	373.72
HFH-2	827.94	735.79	548.64	522.74	706.15	229.93	560.6
HFH-3	1028.72	1014.98	781.74	1016.37	997.47	443.76	766.94
HFH-8	17.79	0	0	0.08	0	0.04	0.85
HIF-1	607.24	237.43	182.84	23.77	47.29	0.73	0
HNF-3(a,b,g)	0	0	0	0	0	0	0
HNF-3b	42.89	0	7.47	0	0	0	0
HNF-4(2)	148.03	7.82	0	0	0	0	0
HNF-4/COUP-TF	263.76	0	0.24	0	0	0	0
Ikaros	83.24	0	0	0	0	0	0
IRF-1, IRF-2	138.77	0	0	-14.8	0	0	0
ISRE(1)	304.51	91.06	77.58	0	0	0	27.35
ISRE(2)	382.63	215.2	198.19	0.43	170.78	0	235.94
L-III BP	275.49	241.53	146.54	0	22.98	0	181.63
KLF	108.31	117.54	0	0	0	0	14.5
MEF-3	0	0	0	-46.34	0	0	5.38
MSP1	302.21	276.21	30.69	0.02	-42.68	0	36.16
hTURT-MT-Box	429.46	286.47	229.63	154.15	231.59	7.45	105.2
MUSF1	344.32	436.98	301.76	66.86	87.54	1.79	-15.33
MZF1	29.96	0	0	-73.68	0	0	-18.38
NF-Y	34.1	0.56	0	2.42	-4.23	0	0
Nkx-2.5	0	0	0	0	-0.34	0	0
NPAS2	9.51	0	0	8.83	0	0	0
NZF-3	39.99	0	0	0	0	0	0
ORE	-1.4	0	0	0	0	0	0
p300	133.17	0	1.06	0	-2.07	0	13.45
PARP	824.8	296.09	464.76	225.32	658.26	2.18	461.97
Pax2	0	0	0	0	0	0	0
Pax3	0	0	0	0	0	0.07	0
Pax4	373.2	295.53	222.62	0.06	240.75	0	264.7

Pax6	190.08	269.15	102.86	0	11.75	0	159.54
Pax8	268.93	331.8	154.13	15.43	91.5	0	215.72
PPARa	0	0	0	0	0	0	0
PPARr	0	0	0	0	0	0	0
RREB(1)	12.98	0	0	-0.75	0	0	0
RSRFC4	382.32	223.53	251.65	40	127.34	8.38	81.78
SAA	198.41	116.9	114.65	0.08	0	0	0
Skn	196.7	0	0.17	0.64	0	0	0
SRY	0.16	0	0	0	0	0	0
Tax/CREB	0	0	0	0	0	0	0
TCF/LEF	0	0	0	0	0	0	0
XBP-1	0	0	0	0	0	0	0
XRE	5.11	0	0	0	0	0	0
ADD1	142.82	0	0	0	0	0.06	44.52
AF1, ARP1, NF-BA	17.73	0	0	0	0.11	0	0
AFP1	0	0.04	0	0	0	0	6.04
AIC, CBF	64.06	60.03	-25.93	0	-43.2	0	2
AML1	174.36	68.48	12.72	2.68	20.54	0	0
AREB6	0	0	0	0	0	0	0
ARP	0	0	0	0	0	0	0
ATF/CRE	0	0	0	0.39	5.43	0	0
ATF2	0.05	0	0	0	0	0	0
CACC	111.84	0	0	0	0	0	0
CCAAT	175.52	0	0	0	0	0	0
CCAC	586.83	0.02	217.38	0.14	148.35	0	150
CD28RC	0	0	0	-0.24	0	0	0
CD28RC, NF-IL2B	0	0	0	1.77	0	0	0
Cdx-2	17.47	0	0	0	0	0	3.28
CEA	0	0	0	0	0	0	0
CPI/CTF/CBTF	0.19	0	0	0	0	0	0

CPE	0	0	0	0	0	0	3.84
CREB2	31.31	0	-104.44	0	-75.14	0	1.08
CSBP	0	0	0	0	0.62	0	0
CTCF	200.8	133.53	83.5	0	5.07	0	0
E12	400.63	186.5	151.87	2.11	142.75	1.92	0.04
EBP40/45	326.33	92.54	61.71	0	64.72	0	0
EKLF(1)	0	0	0	0	0	0	0
EKLF(2)	246.84	0	0	0	0	0	0
Elf-1	0	0	0	0.09	0	0	0
HEN-1	0	0	0	-3.92	0.19	0	0
HFH8/3/LUN	0	0	0	5.19	0.01	0	0
HiNF	222.04	0	0	0	0	0	0
HLF	0	0	0	0.1	0	0	0
HMG	473.47	1.03	25.68	0.09	0	0	81.59
HNF-1A	402.42	38.08	117.68	0	36.49	0	164.58
HOX4C	136.14	0	0	0	0	0	-10.02
HOXD8/9/10	704.27	362.88	301.54	168.98	323.67	33.33	379.82
HOXD8	0	0	0	0	0	0	0
HOXD8	0	0	0	0	0	0	0
HOXD-9/10	38.15	0.08	0	0	0	0	0
ICSBP	0	0	0	0	0	0	0
IsI-1	0	0	0	0	0.14	0	0
KPF1	0	0	0	0	0	0	0
KTP1	0	0	0	0	0	0	0
LCR-F1	0	0	0	0	0.97	0	0
LF-A1	219.39	0	0.19	0	0	0	0
LR1	0	0	0	-1.13	0	0	0
LyF	0	0	0	-1.01	0	0	0
LyF-1	0	0	0	-0.95	0	0	0
LyF-1	304.14	0	0	0	0	0	0.06

MAZ	0	0	0	0	0	0	1.33
MTB-Zf	0	0	-77.4	0	-56.41	0	5.55
MTF	235.63	216.29	17.91	13.47	114.28	0	0.01
MyoD	0.86	48.23	40.98	0	0	0	0
MyoG	0	0	0	0	3.04	0	0
MyT1	0	0	0	0	0	0	0
MZF1(1)	4.16	0	0	0	39.7	0	0
MZF1(2)	10.39	0	0	0	0	0	0
NF-4FA	570.44	306.99	406.22	117.37	760.11	0	328.69
NF-Gma	0.11	0	0	0	0.18	0	0
NFIL-2	0	0	0	0	0	0	0
NF-Y	0	0	0	0	0	0	0
NRF-1	0	0	0	0.02	0	0	0
p53	0	0.01	0	-1.86	0	0	0
p55	0	0	0	0.21	0	0	0
PEBP	0	0	0	0	0	0	1.83
PEBP2	409.94	251.16	131.87	14.13	82.61	0	245.92
PPUR(1)	0	0	0	0	0	0	1.28
PPUR(2)	0	0	0	0	0	0	0
Pur-1	0	0	0	0	2.19	0	0
PYR*	100.06	253.61	210.76	0.04	428.48	0	0
RB	0	0	0	0	0.4	0	0
RFX1,2,3	0	0	0	0	1.91	0	0
RIPE3a1	10.02	0	0	0	0.6	0	0
SIF1	0	0	0	0	-0.13	0	0
SIF2	0	0	0	0	0	0	0
SIF3	0	0	0	0	0	0	0
SP-1,ASP	11.88	0	0	0	0	0	0
SRF,SAP	0	0	0	0	0	0	0
TCE	0	0	0	0	0	0	0

TFE3	5.53	0	0	0.06	0	0	1.58
Tf-LF	149.37	19.82	0	2.58	-25.67	0	2.11
TGT3	0	0	0	0	0	0	0
TTF-1	0	0	0	0	0	0	1.27
TREF1,2	0	0	0	0	3.36	0	0
v-Maf	0	0	0	0	0	0	0
WT1(1)	88.87	379.92	143.64	0	446.32	0	44.96
WT1(2)	257.45	230.46	152.31	0	540.84	0	201.67
WT1(3)	0	0	0	0	0	0	0
X2BP	0	0	0	0	0	0	0
XBP1, X2BP	0	0	0	0	0	0	0
ZNF174	0	0	0	0	0	0	0
AAF	144.95	0	0	0	0	0	0
ABF-1	32.97	0	0	0	0.01	0	0
ACF	0	0.47	0	0	0.86	0	0
ACPBP(CRY-alphaA)	100.76	0	0	0.21	0.12	0	0
ALF1B	0	0	0	0	-34.98	0	0.07
alpha-PAL	0	0	0	0	0	0	0.78
AP-2	0	0	0	0.4	-12.29	0	0
AP-3	0	0	0	0	-5.95	0	0
ATF-delta	0	0	0	0	2.5	0	0
ATF-a	0	0	0	0	0	0	0
beta-M Glob Factor B1	0	0	0	0	66.48	0	0
BZP	0	0	0	0	0	0	0
C/EBPa/g	0	0	0	0	0	0	0
C/EBPalph(1)	0	0	0	0	0	0	0
C/EBPalph(2)	0	0	0	0	1.43	0	0
C/EBPgamma	188.18	0	0	0	0	0	0
CBFB	0	0	0	0	0	0	0
CBF	0	0	0	0	0	0	0

c-Ets-1	0	0	0	0	-2.1	0	0
c-Fos enhancer BP	0	0	0	0	-47.96	0	0.53
c-myb BP	61.41	44.28	0	0	0.16	0	0.9
c-Myc responsive region	-1.6	0	0	0	2.23	0.01	0
COUP-TF	0	0	0	0	0.06	0	0
CP1B	0	0	0	27.33	0	0	0
CP1	0	0	0	104.56	0.04	0	0.13
CREB(2)	0	0	0	-8.92	0.04	0	0
CYP1A1	502.9	89.11	6.96	0	381.36	0	97.69
DE 1	0	0	0	0	0	0	0
E12/E47	0	0	0	0	9.03	0	0
E2	0	0	0	0	0	0	0
EBP-80	0	0	0	0	0	0	0
EGF BP	0.3	0	0	0	0	0	0
EGR-1	329.98	64.19	34.81	0	78.95	0	92.05
EGR-2 BP	7.75	0	0	0	0	0	49.15
EIL-1/2/3	0	0	0	0	-55.37	0	0
ETF	0.71	20.33	0	0	0	0	2.51
Fra-1/Jun	0	0	0	0	0	0.77	0
GATA1(2)	0	0	0	0	4.3	0	0
GBF1/2/3HY5	0	0	0	0	0.13	0	0
GKLF	0	0	0	0	0	0	0
H4TF-1	0	0	0	0	0.15	0	0.03
HFH-11B/11a	0	0	0	0.06	220.21	0	4.46
HFH	0	0	0	0	0.45	0.39	0
HiNF-A	0	0	0	0	0.18	1.45	0
HiNFB/HITF1	0	0	0	0	0	0	0
HiNF-D3	0	0	0	0	0	0	0
HNF1a/b/c	0	0	0	0	0	0	0
HNF-4alpha2/1	0	0	0	0	0	0	0

HOXA4	0	0	0	0	0	0	0
IL-6 RE-BP	-4.58	0	0	-8.42	-121.88	0	0
ISGF	2.1	0	0	0	69.5	0	0.47
kBF-A	111.66	0	123.64	0	243.87	0.5	1.46
Lactoferrin BP	0	0	2.22	0	17.1	0	0
LF-A1(2)	0	0	0	0	0.23	0	0
LF-A2	0	0	0	0	0	0	0
LF-B2	0	0	0	0	0	0.04	0
LH2/Lim-1	0	0	0	0	1.28	0	0
LSF	0	0	106.13	0	6.65	0	0.03
LXRE1	0	0	0	0	0	0.01	0.37
MBP-1(1)	9.62	0	0	0	0	0	-2.02
MBP-1(2)	0	0	0	0	0.26	0	0
MDBP(1)	32.52	0	0	0	0	0	0
MDBP(2)	-0.45	0	0	0	0	0	0
MEF-2a	0	0	0	0	0	0	0
Mfh-1	-11.07	0	0	-6.77	-86.93	0	0
MHC gene promoter W box	51.81	0	0	0.97	267.87	0	0
msx1/2/3	0	0	0	0	0	0	0
Myb(2)	303.22	0	192.59	56	424.92	0	56.66
myc-CF-1	0	0	0	0	0.18	0.09	0
myc-PRF	0	0	0	0	0	0	0
NCAM BP	307.11	0	144.19	0	250.16	0	47.64
NF-1(2)	0	0	0	0	0.27	0	0
NF-1/L	55.15	0	0	0	0.35	0	0
NF-A3	80.59	284.57	682.72	218.61	539.8	124.04	342
NFAT-1	13.69	0	0	0	0.03	0	-0.13
NF-Atp	119.86	0	60.5	0	40.84	0	1.37
NF-Atx	0	0	0	0	0	0	0
NF-E2(2)	126.94	0	0	0	0	0	0

NF-E6/CP1	149.96	0	0	0	0	0	0
NFkB(2)	27.4	1.12	0	0	0	0	0
NFkBp65	0	0	0	0	0	0	0
N-ras BP	48.49	0	71.54	0	183.86	0	0
Oct4/Oct-3	0	0	211.84	167.47	786.48	0	59.51
ODC	25.8	0	2.22	0	-4.51	0	0
p53(2)	0	0	0	0	0	0	0
PAX-1	140.34	7.77	21.73	0	7.49	0	0
pax-2	155.59	0	46.69	0	8.87	0	0
pax-5	0	0	0	0	0	0	0
pax-6	119.74	10	220.57	123.36	324.08	0	47.29
PBGD BP	195.37	0	3.06	0	22.38	0	0
PCF	0	0	0	-23.59	0	0	0
PEPCK Promoter GR	105.47	0	0	0	0.42	0	0
PO-B	0	0	0	0	0	0	0
PRDI-BFc	0	0	0	0	0	0	0
PRDII-BF1	0	-10.6	0.11	-32.74	-70.16	0	0
PREB	0	0	0	0	0	0	0
PTF1-beta	0	0	0	0	33.45	0	0
PTF-1	0.08	0	0	0	0	0	0
PU1	354.15	74.33	302.21	0	369.04	7.76	111.05
PUR	0	0	16.87	0	70.12	0	0.58
RFX1/2/3	0	0	0	0	0	0	0
RORE	0	0	0	0	0	0	0
RVF	0.48	0	0	0	0	0	0
Snail	91.08	2.45	108.55	0	0.28	0	0
SPERM1	0	0	0	0	14.14	0	0
SRF	0	0	0	117.93	0.07	0	0
SSAP	0	0	0	0	0	0	0
Stat1/Stat3	47.66	0	0	0	3.56	0	0

Stat5b	0	0	0	0	0	0	2.32
Surf-2(2)	511.1	292.16	256.74	93.21	450.75	64.99	302.17
T3R	-0.72	4.15	0	-79.69	-5.76	0	4.08
Tat	-131.7	0	0	-88	0.9	-12.06	0
TEFI(1)	-137.94	0	-3.87	-12.41	-25.18	-26.24	-93.55
TEFI	581.16	343.13	591.19	304.1	895.97	197.66	511.33
TFE3-L	-67.26	0.06	0	0	1.28	0	-15.63
TFEB	159.7	203.58	154.64	0	214.09	0	18.63
Thy-1BP	539.57	321.08	406.25	365.73	572.92	167.5	278
Transferrin BP	242.43	-4.56	25.59	0	181.11	0	0
TTF-1(1)	-40.46	-16.83	0	0	0	0	0
TxREF NF-III	-55.94	0	0	0	0	0	0
URE	-32.84	0	0	0	2.32	0	0
v-rel 50-55k	81.44	0	0	0	0	0	0
WAP BP	230.94	0.04	0	0	0	0	0
XBP1(2)	237.94	107.18	0	0	11.08	0	0
YB1	404.17	0.26	0	-48.93	-138.13	0	0.56