Supplementary Figure Legends:

Fig S-1. Ablation of *E2f1-3* does not affect erythroid or lymphoid lineages in BM.
Cells isolated from femur of mice of indicated genotypes stained with lineage markers $Ter119^+$, $CD3^+$, $B220^+$ and $CD11b^+$ representing the erythroid, lymphoid and myeloid lineages respectively. (A) E2F single knockout mice. (B) E2F double knockout mice.

Fig S-2. Ablation of *E2f1-3* after BM transplant leads to reduction in myeloid population. (A) Schematic diagram of experimental design. Bone marrow from $E2f1^{-/-}2^{-/-}3^{f/f}$ and *Mx-Cre;*$E2f1^{-/-}2^{-/-}3^{f/f}$ mice was transplanted into wild type mice and 5 weeks post-transplant mice were injected with pIpC. (B) FACS profile of bone marrow cells isolated from $E2f1^{-/-}2^{-/-}3^{f/f}$ (control) and *Mx-Cre;*$E2f1^{-/-}2^{-/-}3^{f/f}$ mice. (C) Bone marrow cellularity from the femur of the mice. Values are mean ± SD ($p<0.004$). (D) Total number of $Cd11b^+$ and $Gr\text{-}1^+$ cells isolated from BM. Values are mean ± SD ($p<0.0006$). (E) The percentage of apoptotic cells in BM co-stained with myeloid marker Cd11b. (F) Flow diagram depicting the hematopoietic lineages in BM. Lineages affected by the ablation of *E2f1-3* are shown in red.

Fig S-3. ChIP assay to confirm the genes involved in G_1/S and G_2/M regulation are direct targets of E2f3. $CD11b^+$ myeloid cells isolated from BM of mice were subjected to ChIP assays using E2F3 antibody. (A&B) E2F3 recruitment on promoters of G_1/S and G_2/M targets in wild type myeloid cells. (C&D) ChIP assay performed in $E2f3a^{-/-}$ and $E2f3b^{-/-}$ myeloid cells to show E2F3 loading on promoters of G_1/S and G_2/M genes. (E) RT-PCR to measure the expression of *E2f4-8* in $E2f1^{-/-}$ (open bars) and *Mx-cre*;$E2f1^{-/-}E2f2^{-/-}E2f3^{f/f}$ (closed bars) in myeloid cells.

Figure S-4. c-Myc regulates the expression of *E2f1-3*.
(A) *c-Myc* PCR genotyping on genomic DNA isolated from the control and *cre*-infected $c\text{-}Myc^{f/f}$-BMM. (B) BrdU incorporation in serum (red bars), and CSF-1 (blue bars) stimulated $c\text{-}Myc^{f/f}$-CSF1R cells. $c\text{-}Myc^{f/f}$-CSF1R cells infected with either the control- or *cre*- retroviruses were serum starved for 60 hours. Quiescent MEFs were then re-stimulated with media containing serum or CSF-1 and assessed for BrdU incorporation at the indicated time points as described in "Materials and Methods". (C) $c\text{-}Myc^{f/f}$-CSF1R MEFs were transfected with the *E2f3a*-luciferase plasmid, along with thymidine kinase renilla luciferase construct as an internal control. Transfected cells were incubated in low-serum and then stimulated with either serum or CSF-1 and luciferase activity was measured at the indicated time points.

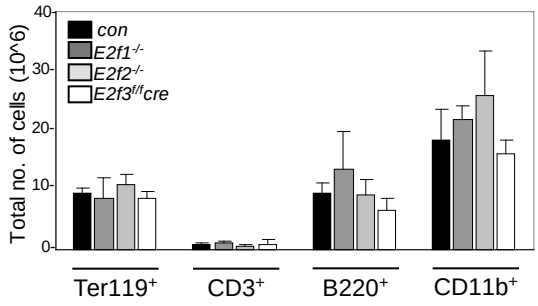
Figure S-5. *E2f3a* can rescue the proliferation defect in *c-Myc* deleted cells. The $c\text{-}Myc^{f/f}$-*CSF-1R* cell were infected with vector alone or *E2f3a*-expressing retroviruses and then with either vector alone (red) or *cre*-expressing retroviruses (blue), selected for hygromycin and puromycin resistance, and used in the following assays. (A) BrdU incorporation of $c\text{-}Myc^{f/f}$-*CSF-1R* cell line. Cells were synchronized by serum starvation, stimulated by addition of CSF-1. Cells were incubated with BrdU for 2 hours and then fixed and stained at the indicated time points. A total of 500 DAPI-stained nuclei from each cell line were counted, and the percent positive for BrdU incorporation is shown. (B) *c-Myc* PCR genotyping of the population of cells from the experiment described above showing efficient deletion of *c-Myc*. The floxed allele ($c\text{-}Myc^{f/f}$) produces a 450-bp PCR fragment, and the knockout $c\text{-}Myc^{-/-}$ allele produces a 300-bp fragment. (C) Cells from the experiment described above were also tested for their long-term growth potential by colony formation assay. Values shown have been corrected for deletion of *c-Myc* by colony PCR. (D) *c-Myc* PCR genotyping on genomic DNA from the *cre*-infected $c\text{-}Myc^{f/f}$-CSF-1R colonies.

Figure S-6. List of primers used for RT- PCR, ChIP assay and genotyping.

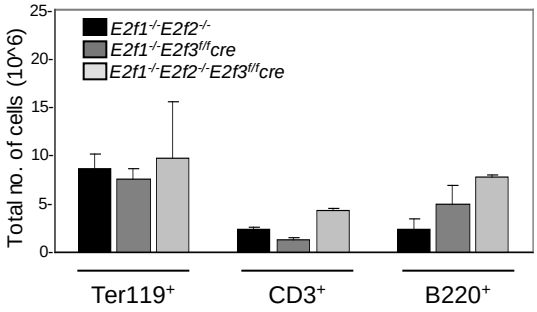
Supplementary Table- I. List of E2F targets upregulated and downregulated in *Mx-cre*;*E2f1*$^{-/-}$ *E2f2*$^{-/-}$*E2f3*$^{f/f}$ myeloid cells.

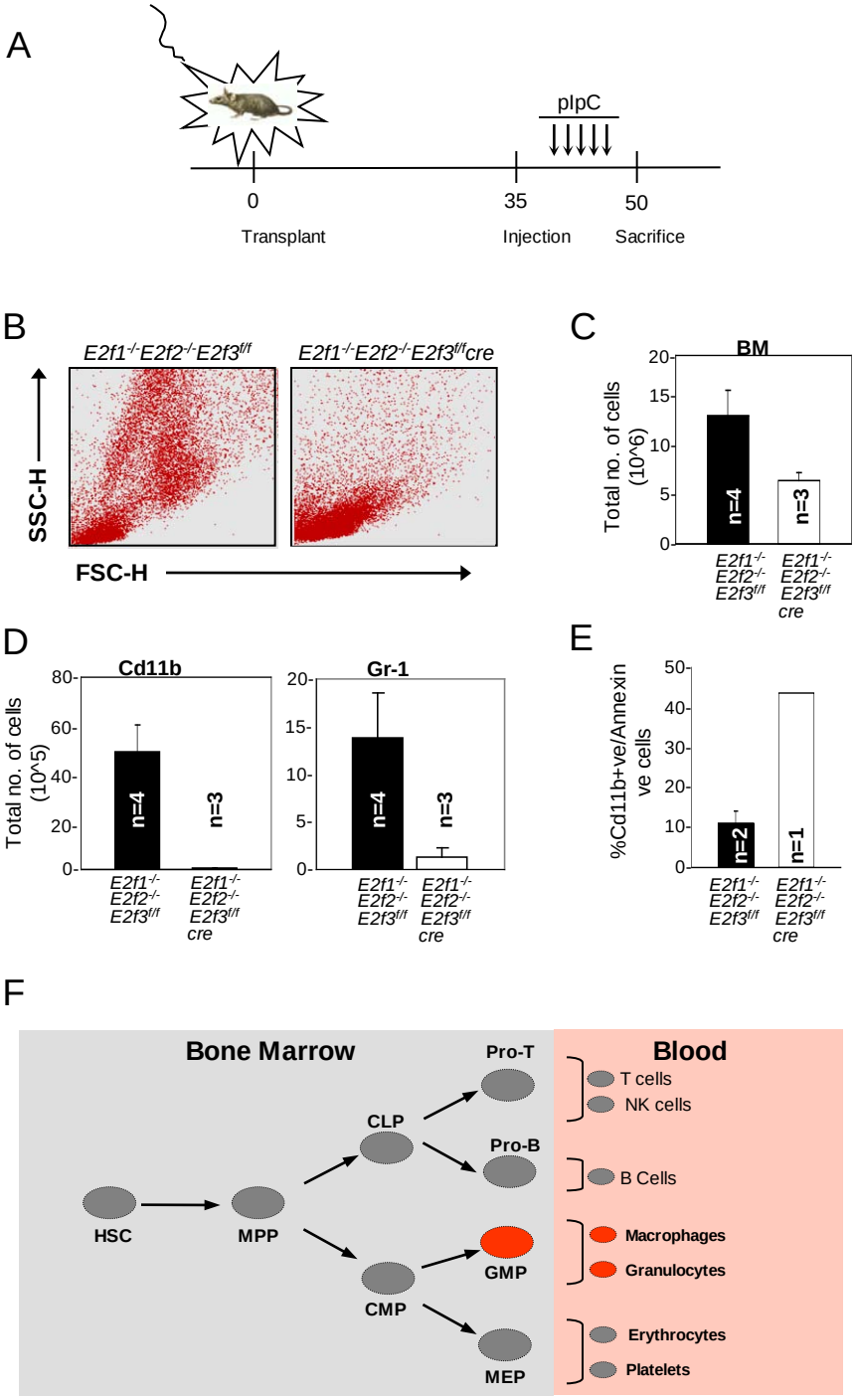
Supplementary Table- II. List of genes upregulated and downregulated in *Mx-cre*; *E2f1*$^{-/-}$*E2f2*$^{-/-}$ *E2f3*$^{f/f}$ myeloid cells ($p<0.001$).

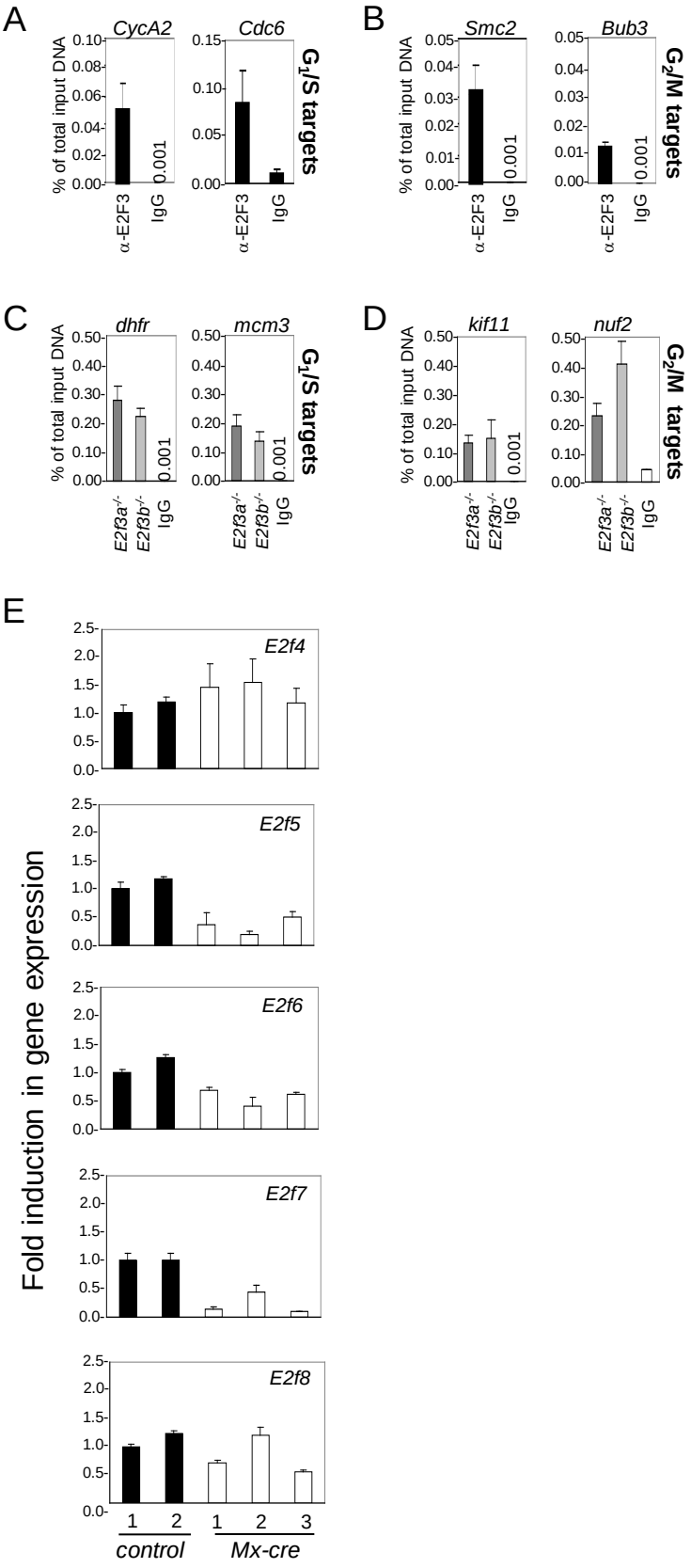
A


Total no. of cells (10^6)
40
30
20
10
0
con
E2f1-/-
E2f2-/-
E2f3f/fcre
Ter119+
CD3+
B220+
CD11b+

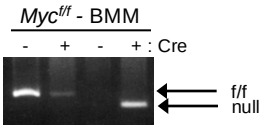
B


Total no. of cells (10^6)
25
20
15
10
5
0
E2f1-/-E2f2-/-
E2f1-/-E2f3f/fcre
E2f1-/-E2f2-/-E2f3f/fcre
Ter119+
CD3+
B220+

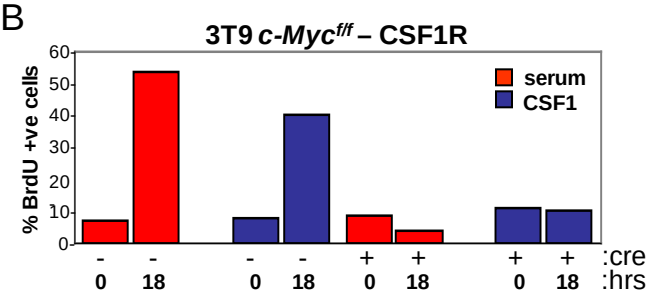

A
pIpC
0
35
50
Transplant
Injection
Sacrifice
B
E2f1-/-E2f2-/-E2f3f/f
E2f1-/-E2f2-/-E2f3f/fcre
SSC-H
FSC-H
C
BM
Total no. of cells (10^6)
n=4
n=3
E2f1-/- E2f2-/- E2f3f/f
E2f1-/- E2f2-/- E2f3f/f cre
D
Cd11b
Gr-1
Total no. of cells (10^5)
n=4
n=3
E2f1-/- E2f2-/- E2f3f/f
E2f1-/- E2f2-/- E2f3f/f cre
E
%Cd11b+ve/Annexin ve cells
n=2
n=1
E2f1-/- E2f2-/- E2f3f/f
E2f1-/- E2f2-/- E2f3f/f cre
F
Bone Marrow
Blood
HSC
MPP
CLP
CMP
GMP
MEP
Pro-T
Pro-B
T cells
NK cells
B Cells
Macrophages
Granulocytes
Erythrocytes
Platelets


A
CycA2
Cdc6
G1/S targets
% of total input DNA
α-E2F3
IgG
0.001
B
Smc2
Bub3
G2/M targets
C
dhfr
mcm3
E2f3a-/-
E2f3b-/-
D
kif11
nuf2
E
E2f4
E2f5
E2f6
E2f7
E2f8
Fold induction in gene expression
control
Mx-cre

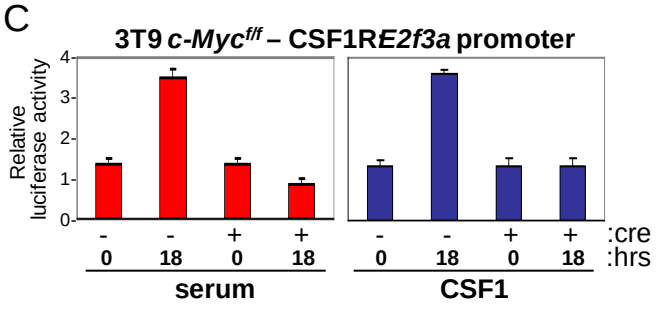
A

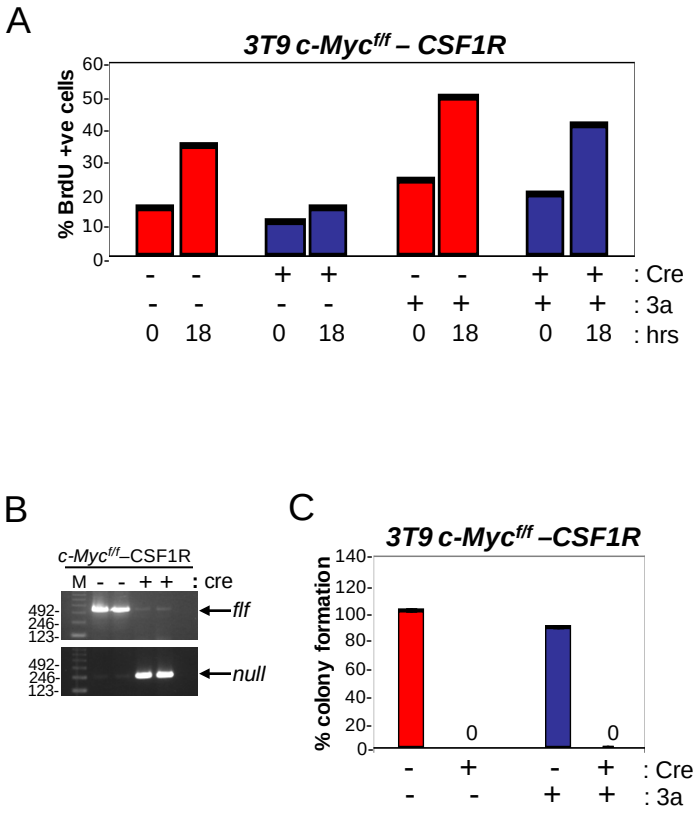

Myc f/f - BMM
- + - + : Cre
f/f
null

B


3T9 c-Myc f/f – CSF1R
% BrdU +ve cells
60
50
40
30
20
10
0
serum
CSF1
- - - - + + + + :cre
0 18 0 18 0 18 0 18 :hrs

C


3T9 c-Myc f/f – CSF1RE2f3a promoter
Relative luciferase activity
4
3
2
1
0
- - + + - - + + :cre
0 18 0 18 0 18 0 18 :hrs
serum
CSF1


A
3T9 c-Myc f/f – CSF1R
% BrdU +ve cells
60
50
40
30
20
10
0
- - + + - - + + : Cre
- - - - + + + + : 3a
0 18 0 18 0 18 0 18 : hrs
B
c-Myc f/f–CSF1R
M - - + + : cre
492-
246-
123-
f/f
null
C
3T9 c-Myc f/f –CSF1R
% colony formation
140
120
100
80
60
40
20
0
0
0
- + - + : Cre
- - + + : 3a
D
colonies
c-Myc f/f–CSF1R
M 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 H20
492-
246-
123-
f/f
null

Gene	Sense primer(s)	Antisense primer(s)
RT-PCR		
Mcm3	CGCAGGAAGAATGAAAAGAGGG	CTGAGGAAGCAGGAAGTGAGAGTC
Cdc6	AGTTCTGTGCCCGCAAAGTG	AGCAGCAAAGAGCAAACCAGG
Cdt1	TATGGAGGTGGTCTGTGCAA	GGCAAGGAGCTCAAAGTCAC
Nuf2	TTGGACGCTCGGTTTTTAAC	TCGGATTTGGAAGAAAATCG
Nusap1	GAGCAAGCTGAGACGGAATC	CTGTATCCCTGGGGTCTTGA
CcnF	TGAAGCAGAGGTTCGAGGAT	TCTGTCCTCCTGAAGGCTGT
ChIP :		
Dtl	CAGCACCGCCATCTTCTC	AACTCCCGCCACTAAGAGC
Mcm3	ATAACGCGTCTCTGCTCCAT	CACCTCGTCATCCAGGAAGT
Cdc6	TGATGAGTGACAACTAATCAG	GAGCTTTGCACTCTTCAGG
Cyc A2	TGTAAGATTCCCGTCGGGCCTTC	AGGCGGGAGGAGCGTAGAGCC
Dhfr	CGGCAATCCTAGGGTGAAGGCTGGT	GGCTCCATTCAGCGACGAAAGGTGC
Bub3	AGGAGAAGGATGTCACAAGAGC	ATTTTCCGCAGTCATCCTGT
Kif11	GGAATCGTTGCTGATTTCG	TTACCTGCATCTCACCACCA
Smc2	TCCTTAGGGCAAAAGAGGAA	GGGCCAAGAGCAGCACTAC
Nuf2	AGGGGCTAGAAACCGTCTGT	CCGAGAAGGCTCAGAAGACC
Genotype :		
E2f1	AGAAGTCACGCTATGAAACCTCAC	AGCCACTGGATATGATTCTTGGAC
	AGTGCCAGCGGGGCTGCTAAAG	
E2f2	CCTGAGCGAGTCGGAGGATGG	GCCCCTAACACATGCACCCATTGG
	ACCAAAGAACGGAGCCGGTTGGCG	
E2f3	TGTGAATAATTTTTGGCATGTTTT	AAGGGAAGGGAAAATTAAATCTGA
		CTTATTCTGAGTGTGGACATACCG
c-Myc	CACCGCCTACATCCTGTCCATTC	TACAGTCCCAAAGCCCCAGCCAAG
		AATTTAAGC CTGACCCCCGCGGCA
Mx-Cre	CTGCATTACCGGTCGATGCAAC	GCATTGCTGTCACTTGGTCGTG

Supplementary Table-1

Upregulated Genes :

Gene symbol	Description	Function	Ref
Mcm5	minichromosome maintenance deficient 5, cell division cycle 46 (S. cerevisiae)	S	(1,2)
Mcm7	minichromosome maintenance deficient 7 (S. cerevisiae)	S	(2)
Mcm4	minichromosome maintenance deficient 4 homolog (S. cerevisiae)	S	(2)
Mcm6	minichromosome maintenance deficient 6 (MIS5 homolog, S. pombe) (S. cerevisiae)	S	(3)
Rpa2	replication protein A2	S	(4)
Lig1	ligase I, DNA, ATP-dependent	S	(5)
Cdc6	cell division cycle 6 homolog (S. cerevisiae)	S	(6)
Rfc2	replication factor C (activator 1) 2	S	(7)
Fen1	flap structure specific endonuclease 1	S	(8)
Rad51	RAD51 homolog (S. cerevisiae)	S	(9)
Orc1l	origin recognition complex, subunit 1-like (S.cereviaiae)	S	(10)
Chaf1b	chromatin assembly factor 1, subunit B (p60)	S	(11)
Cdt1	chromatin licensing and DNA replication factor 1	S	(12)
Mcm3	minichromosome maintenance deficient 3 (S. cerevisiae)	S	(13)
Dtl	denticleless homolog (Drosophila)	S	(14)
Mcm2	minichromosome maintenance deficient 2 mitotin (S. cerevisiae)	S	(15)
Pola2	polymerase (DNA directed), alpha 2	S	(16)
Rad54l	RAD54 like (S. cerevisiae)	S	(17)
Gins1	GINS complex subunit 1 (Psf1 homolog)	S	(18)
Rpa1	replication protein A1	S	(19)
E2f1	E2F transcription factor 1	G_1/S	(20)
Cdkn1a	cyclin-dependent kinase inhibitor 1A (P21)	G_1/S	(21)
Ddb2	damage specific DNA binding protein 2	G_1/S	(22)
Chek1	checkpoint kinase 1 homolog (S. pombe)	G_1/S	(23)
Shmt1	serine hydroxymethyltransferase 1 (soluble)	G_1/S	(24)
Dhfr	dihydrofolate reductase	G_1/S	(25)
Cdca7	cell division cycle associated 7	Others	(26)
Prkcbp1	protein kinase C binding protein 1	Others	(27)
Cenph	centromere protein H	Others	(28)
Pnpo	pyridoxine 5'-phosphate oxidase	Others	(29)
Mthfd1	methylenetetrahydrofolate dehydrogenase (NADP+ dependent), methenyltetrahydrofolate	Others	(30)

	cyclohydrolase, formyltetrahydrofolate synthase		
Elovl3	elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 3	Others	(31)
Mybbp1a	MYB binding protein (P160) 1a	Others	(32)
Isg20l1	interferon stimulated exonuclease gene 20-like 1	Others	(33)
Usp37	ubiquitin specific peptidase 37	Others	(34)
Gls2	glutaminase 2 (liver, mitochondrial)	Others	(35)
Trim37	tripartite motif protein 37	Others	(36)
Ssbp4	single stranded DNA binding protein 4	Others	(37)
Dcp2	DCP2 decapping enzyme homolog (S. cerevisiae)	Others	(38)
Gtf2f2	general transcription factor IIF, polypeptide 2	Others	(39)
Ung	uracil DNA glycosylase	Others	(40)
Pold1	polymerase (DNA directed), delta 1, catalytic subunit	Others	(41)
Syce2	synaptonemal complex central element protein 2	Others	(42)
Fancg	Fanconi anemia, complementation group G	Others	(43)
Rad51l1	RAD51-like 1 (S. cerevisiae)	Others	(44)

Downregulated Genes :

Gene symbol	Description	Function	Ref
Nusap1	nucleolar and spindle associated protein 1	G_2/M	(45)
H2afx	H2A histone family, member X	G_2/M	(46)
Spc25	SPC25, NDC80 kinetochore complex component, homolog (S. cerevisiae)	G_2/M	(47)
Sgol1	shugoshin-like 1 (S. pombe)	G_2/M	(48)
Ncaph	non-SMC condensin I complex, subunit H	G_2/M	(49)
Ccnf	cyclin F	G_2/M	(50)
Aspm	Asp (abnormal spindle)-like, microcephaly associated (Drosophila)	G_2/M	(51)
Prc1	protein regulator of cytokinesis 1	G_2/M	(52)
Mki67	antigen identified by monoclonal antibody Ki 67	G_2/M	(53)
Cenpf	centromere protein F	G_2/M	(54)
Cenpl	centromere protein L	G_2/M	(55)
Fbxo5	F-box protein 5	G_2/M	(56)
Smc2	structural maintenance of chromosomes 2	G_2/M	(57)
Nuf2	NUF2, NDC80 kinetochore complex component, homolog (S. cerevisiae)	G_2/M	(58)
Kif 11	kinesin family member 11	G_2/M	(59)
Skp2	S-phase kinase-associated protein 2 (p45)	G_2/M	(60)
Kif2c	kinesin family member 2C	G_2/M	(61)
Ndc80	NDC80 homolog, kinetochore complex component (S. cerevisiae)	G_2/M	(62)
Cenpe	centromere protein E	G_2/M	(63)
Cenpc1	centromere protein C1	G_2/M	(64)
Pbk	PDZ binding kinase	G_2/M	(65)
Kif20a	kinesin family member 20A	G_2/M	(66)
Cks2	CDC28 protein kinase regulatory subunit 2	G_2/M	(67)
Bub3	budding uninhibited by benzimidazoles 3 homolog (S. cerevisiae)	G_2/M	(68)
Stag3	stromal antigen 3	G_2/M	(69)
Lmnb1	lamin B1	G_2/M	(70)
Esco2	establishment of cohesion 1 homolog 2 (S. cerevisiae)	G_2/M	(71)
Cdkn2c	cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)	G_2/M	(72)
Ccng2	cyclin G2	G_2/M	(73)
Tyms	Thymidylate synthase	G_1/S	(74)
Ccne2	cyclin E2	G_1/S	(75)
Ccna2	cyclin A2	G_1/S	(76)
Tk2	thymidine kinase 2, mitochondrial	G_1/S	(77)
Gspt2	G1 to S phase transition 2	G_1/S	(78)

Sp1	trans-acting transcription factor 1	Others	(79)
Ier5	immediate early response 5	Others	(80)
E2f2	E2F transcription factor 2	Others	(81)
Phc1	polyhomeotic-like 1 (Drosophila)	Others	(82)
Junb	Jun-B oncogene	Others	(83)
Dbp	D site albumin promoter binding protein	Others	(84)
Syk	spleen tyrosine kinase	Others	(85)
Serbp1	Serpine1 mRNA binding protein 1	Others	(86)
Calm2	calmodulin 2	Others	(87)
Ube2t	ubiquitin-conjugating enzyme E2T (putative)	Others	(88)
Eps8	epidermal growth factor receptor pathway substrate 8	Others	(89)
Tcf19	transcription factor 19	Others	(90)
Sfrs7	splicing factor, arginine/serine-rich 7	Others	(91)
Depdc1a	DEP domain containing 1a	Others	(92)
Cklf	chemokine-like factor	Others	(93)
Brd8	bromodomain containing 8	Others	(94)
Dleu2	deleted in lymphocytic leukemia, 2	Others	(95)
H2afv	H2A histone family, member V	Others	(96)
Dhx40	DEAH (Asp-Glu-Ala-His) box polypeptide 40	Others	(97)
Dck	deoxycytidine kinase	Others	(23)
Capns2	calpain, small subunit 2	Others	(98)
Prr11	proline rich 11	Others	(99)
Top2a	topoisomerase (DNA) II alpha	Others	(100)
Letm2	leucine zipper-EF-hand containing transmembrane protein 2	Others	(101)
Dctn4	dynactin 4	Others	(102)
Mrp63	mitochondrial ribosomal protein 63	Others	(103)
Rnf167	ring finger protein 167	Others	(99)
Id3	inhibitor of DNA binding 3	Others	(104)
Mycn	v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)	Others	(105)
Apoe	apolipoprotein E	Others	(106)
Sft2d3	SFT2 domain containing 3	Others	(107)
Dbp	D site albumin promoter binding protein	Others	(108)
Hist2h2aa2	histone cluster 2, H2aa2	Others	(109)
Hist3h2a	histone cluster 3, H2a	Others	(110)
Hist1h1e	histone cluster 1, H1e	Others	(111)
Asf1b	ASF1 anti-silencing function 1 homolog B (S. cerevisiae)	Others	(112)

References:

1. Ferguson, R., and Maller, J. (2008) *J Cell Sci* **121**, 3224-3232
2. You, Z., and Masai, H. (2005) *Nucleic Acids Res* **33**, 3033-3047
3. You, Z., Komamura, Y., and Ishimi, Y. (1999) *Mol Cell Biol* **19**, 8003-8015
4. Manthey, K., Opiyo, S., Glanzer, J., Dimitrova, D., Elliott, J., and Oakley, G. (2007) *J Cell Sci* **120**, 4221-4229
5. Bentley, D., Harrison, C., Ketchen, A., Redhead, N., Samuel, K., Waterfall, M., Ansell, J., and Melton, D. (2002) *J Cell Sci* **115**, 1551-1561
6. Boronat, S., and Campbell, J. (2008) *Cell Cycle* **7**, 597-601
7. Tomida, J., Masuda, Y., Hiroaki, H., Ishikawa, T., Song, I., Tsurimoto, T., Tateishi, S., Shiomi, T., Kamei, Y., Kim, J., Kamiya, K., Vaziri, C., Ohmori, H., and Todo, T. (2008) *J Biol Chem* **283**, 9071-9079
8. Larsen, E., Gran, C., Saether, B., Seeberg, E., and Klungland, A. (2003) *Mol Cell Biol* **23**, 5346-5353
9. Wray, J., Liu, J., Nickoloff, J., and Shen, Z. (2008) *Cancer Res* **68**, 2699-2707
10. Bowers, J., Randell, J., Chen, S., and Bell, S. (2004) *Mol Cell* **16**, 967-978
11. Takami, Y., Ono, T., Fukagawa, T., Shibahara, K., and Nakayama, T. (2007) *Mol Biol Cell* **18**, 129-141
12. Lutzmann, M., and Méchali, M. (2008) *Mol Cell* **31**, 190-200
13. Lin, D., Aggarwal, P., and Diehl, J. (2008) *Proc Natl Acad Sci U S A* **105**, 8079-8084
14. Sansam, C., Shepard, J., Lai, K., Ianari, A., Danielian, P., Amsterdam, A., Hopkins, N., and Lees, J. (2006) *Genes Dev* **20**, 3117-3129
15. Bochman, M., and Schwacha, A. (2008) *Mol Cell* **31**, 287-293
16. Mizuno, T., Yamagishi, K., Miyazawa, H., and Hanaoka, F. (1999) *Mol Cell Biol* **19**, 7886-7896
17. Mills, K., Ferguson, D., Essers, J., Eckersdorff, M., Kanaar, R., and Alt, F. (2004) *Genes Dev* **18**, 1283-1292
18. Chang, Y., Wang, G., Bermudez, V., Hurwitz, J., and Chen, X. (2007) *Proc Natl Acad Sci U S A* **104**, 12685-12690
19. Liu, J., Kuo, S., and Melendy, T. (2006) *J Cell Biochem* **99**, 1452-1462
20. Field, S., Tsai, F., Kuo, F., Zubiaga, A., Kaelin, W. J., Livingston, D., Orkin, S., and Greenberg, M. (1996) *Cell* **85**, 549-561
21. Cheng, T., Rodrigues, N., Shen, H., Yang, Y., Dombkowski, D., Sykes, M., and Scadden, D. (2000) *Science* **287**, 1804-1808
22. Prost, S., Lu, P., Caldwell, H., and Harrison, D. (2007) *Oncogene* **26**, 3572-3581
23. Shimada, M., Niida, H., Zineldeen, D., Tagami, H., Tanaka, M., Saito, H., and Nakanishi, M. (2008) *Cell* **132**, 221-232
24. Woeller, C., Anderson, D., Szebenyi, D., and Stover, P. (2007) *J Biol Chem* **282**, 17623-17631
25. Nicolas, E., Roumillac, C., and Trouche, D. (2003) *Mol Cell Biol* **23**, 1614-1622
26. Osthus, R., Karim, B., Prescott, J., Smith, B., McDevitt, M., Huso, D., and Dang, C. (2005) *Cancer Res* **65**, 5620-5627
27. Fossey, S., Kuroda, S., Price, J., Pendleton, J., Freedman, B., and Bowden, D. (2000) *Mamm Genome* **11**, 919-925

28. Fukagawa, T., Mikami, Y., Nishihashi, A., Regnier, V., Haraguchi, T., Hiraoka, Y., Sugata, N., Todokoro, K., Brown, W., and Ikemura, T. (2001) *EMBO J* **20**, 4603-4617
29. Khayat, M., Korman, S., Frankel, P., Weintraub, Z., Hershckowitz, S., Sheffer, V., Ben Elisha, M., Wevers, R., and Falik-Zaccai, T. (2008) *Mol Genet Metab* **94**, 431-434
30. Christensen, K., Rohlicek, C., Andelfinger, G., Michaud, J., Bigras, J., Richter, A., Mackenzie, R., and Rozen, R. (2009) *Hum Mutat* **30**, 212-220
31. Brolinson, A., Fourcade, S., Jakobsson, A., Pujol, A., and Jacobsson, A. (2008) *Endocrinology* **149**, 3158-3166
32. Yamauchi, T., Keough, R., Gonda, T., and Ishii, S. (2008) *Genes Cells* **13**, 27-39
33. Kawase, T., Ichikawa, H., Ohta, T., Nozaki, N., Tashiro, F., Ohki, R., and Taya, Y. (2008) *Oncogene* **27**, 3797-3810
34. Hochstrasser, M. (2009) *Nature* **458**, 422-429
35. Squires, S., Ewart, H., McCarthy, C., Brosnan, M., and Brosnan, J. (1997) *Diabetes* **46**, 1945-1949
36. Kallijärvi, J., Avela, K., Lipsanen-Nyman, M., Ulmanen, I., and Lehesjoki, A. (2002) *Am J Hum Genet* **70**, 1215-1228
37. Castro, P., Liang, H., Liang, J., and Nagarajan, L. (2002) *Genomics* **80**, 78-85
38. Floor, S., Jones, B., and Gross, J. *RNA Biol* **5**, 189-192
39. Purrello, M., Di Pietro, C., Rapisarda, A., Mirabile, E., Motta, S., Sichel, G., and Grzeschik, K. (1995) *Cytogenet Cell Genet* **69**, 75-80
40. Begum, N., Kinoshita, K., Kakazu, N., Muramatsu, M., Nagaoka, H., Shinkura, R., Biniszkiewicz, D., Boyer, L., Jaenisch, R., and Honjo, T. (2004) *Science* **305**, 1160-1163
41. Venkatesan, R., Treuting, P., Fuller, E., Goldsby, R., Norwood, T., Gooley, T., Ladiges, W., Preston, B., and Loeb, L. (2007) *Mol Cell Biol* **27**, 7669-7682
42. Bolcun-Filas, E., Costa, Y., Speed, R., Taggart, M., Benavente, R., De Rooij, D., and Cooke, H. (2007) *J Cell Biol* **176**, 741-747
43. Yamamoto, K., Ishiai, M., Matsushita, N., Arakawa, H., Lamerdin, J., Buerstedde, J., Tanimoto, M., Harada, M., Thompson, L., and Takata, M. (2003) *Mol Cell Biol* **23**, 5421-5430
44. Sellick, G., Fielding, S., Qureshi, M., Catovsky, D., and Houlston, R. (2008) *Leuk Lymphoma* **49**, 130-133
45. Ribbeck, K., Groen, A., Santarella, R., Bohnsack, M., Raemaekers, T., Köcher, T., Gentzel, M., Görlich, D., Wilm, M., Carmeliet, G., Mitchison, T., Ellenberg, J., Hoenger, A., and Mattaj, I. (2006) *Mol Biol Cell* **17**, 2646-2660
46. Kinner, A., Wu, W., Staudt, C., and Iliakis, G. (2008) *Nucleic Acids Res* **36**, 5678-5694
47. McCleland, M., Kallio, M., Barrett-Wilt, G., Kestner, C., Shabanowitz, J., Hunt, D., Gorbsky, G., and Stukenberg, P. (2004) *Curr Biol* **14**, 131-137
48. Wang, X., Yang, Y., Duan, Q., Jiang, N., Huang, Y., Darzynkiewicz, Z., and Dai, W. (2008) *Dev Cell* **14**, 331-341
49. Schmiesing, J., Ball, A. J., Gregson, H., Alderton, J., Zhou, S., and Yokomori, K. (1998) *Proc Natl Acad Sci U S A* **95**, 12906-12911

50. Kong, M., Barnes, E., Ollendorff, V., and Donoghue, D. (2000) *EMBO J* **19**, 1378-1388
51. Kouprina, N., Pavlicek, A., Collins, N., Nakano, M., Noskov, V., Ohzeki, J., Mochida, G., Risinger, J., Goldsmith, P., Gunsior, M., Solomon, G., Gersch, W., Kim, J., Barrett, J., Walsh, C., Jurka, J., Masumoto, H., and Larionov, V. (2005) *Hum Mol Genet* **14**, 2155-2165
52. Zhu, C., Lau, E., Schwarzenbacher, R., Bossy-Wetzel, E., and Jiang, W. (2006) *Proc Natl Acad Sci U S A* **103**, 6196-6201
53. Kim, Y., Ketter, R., Steudel, W., and Feiden, W. (2007) *Am J Clin Pathol* **128**, 118-125
54. Evans, H., Edwards, L., and Goodwin, R. (2007) *Exp Cell Res* **313**, 2427-2437
55. Gieni, R., Chan, G., and Hendzel, M. (2008) *J Cell Biochem* **104**, 2027-2039
56. Di Fiore, B., and Pines, J. (2007) *J Cell Biol* **177**, 425-437
57. Losada, A., Hirano, M., and Hirano, T. (2002) *Genes Dev* **16**, 3004-3016
58. Mikami, Y., Hori, T., Kimura, H., and Fukagawa, T. (2005) *Mol Cell Biol* **25**, 1958-1970
59. Castillo, A., Morse, H. r., Godfrey, V., Naeem, R., and Justice, M. (2007) *Cancer Res* **67**, 10138-10147
60. Nakayama, K., Nagahama, H., Minamishima, Y., Miyake, S., Ishida, N., Hatakeyama, S., Kitagawa, M., Iemura, S., Natsume, T., and Nakayama, K. (2004) *Dev Cell* **6**, 661-672
61. Shimo, A., Tanikawa, C., Nishidate, T., Lin, M., Matsuda, K., Park, J., Ueki, T., Ohta, T., Hirata, K., Fukuda, M., Nakamura, Y., and Katagiri, T. (2008) *Cancer Sci* **99**, 62-70
62. Williams, B., Leung, G., Maiato, H., Wong, A., Li, Z., Williams, E., Kirkpatrick, C., Aquadro, C., Rieder, C., and Goldberg, M. (2007) *J Cell Sci* **120**, 3522-3533
63. Putkey, F., Cramer, T., Morphew, M., Silk, A., Johnson, R., McIntosh, J., and Cleveland, D. (2002) *Dev Cell* **3**, 351-365
64. Wong, L., Brettingham-Moore, K., Chan, L., Quach, J., Anderson, M., Northrop, E., Hannan, R., Saffery, R., Shaw, M., Williams, E., and Choo, K. (2007) *Genome Res* **17**, 1146-1160
65. Abe, Y., Takeuchi, T., Kagawa-Miki, L., Ueda, N., Shigemoto, K., Yasukawa, M., and Kito, K. (2007) *J Mol Biol* **370**, 231-245
66. Hill, E., Clarke, M., and Barr, F. (2000) *EMBO J* **19**, 5711-5719
67. Spruck, C., de Miguel, M., Smith, A., Ryan, A., Stein, P., Schultz, R., Lincoln, A., Donovan, P., and Reed, S. (2003) *Science* **300**, 647-650
68. Tange, Y., and Niwa, O. (2008) *Genetics* **179**, 785-792
69. Storre, J., Schäfer, A., Reichert, N., Barbero, J., Hauser, S., Eilers, M., and Gaubatz, S. (2005) *J Biol Chem* **280**, 41380-41386
70. Vergnes, L., Péterfy, M., Bergo, M., Young, S., and Reue, K. (2004) *Proc Natl Acad Sci U S A* **101**, 10428-10433
71. Vega, H., Waisfisz, Q., Gordillo, M., Sakai, N., Yanagihara, I., Yamada, M., van Gosliga, D., Kayserili, H., Xu, C., Ozono, K., Jabs, E., Inui, K., and Joenje, H. (2005) *Nat Genet* **37**, 468-470
72. Myers, T., Andreuzza, S., and Franklin, D. (2004) *Exp Cell Res* **300**, 365-378

73. Martínez-Gac, L., Marqués, M., García, Z., Campanero, M., and Carrera, A. (2004) *Mol Cell Biol* **24**, 2181-2189
74. Le François, B., Maroun, J., and Birnboim, H. (2007) *Br J Cancer* **97**, 1242-1250
75. Geng, Y., Lee, Y., Welcker, M., Swanger, J., Zagozdzon, A., Winer, J., Roberts, J., Kaldis, P., Clurman, B., and Sicinski, P. (2007) *Mol Cell* **25**, 127-139
76. Farràs, R., Baldin, V., Gallach, S., Acquaviva, C., Bossis, G., Jariel-Encontre, I., and Piechaczyk, M. (2008) *Mol Cell Biol* **28**, 4173-4187
77. Akman, H., Dorado, B., López, L., García-Cazorla, A., Vilà, M., Tanabe, L., Dauer, W., Bonilla, E., Tanji, K., and Hirano, M. (2008) *Hum Mol Genet* **17**, 2433-2440
78. Hoshino, S., Imai, M., Mizutani, M., Kikuchi, Y., Hanaoka, F., Ui, M., and Katada, T. (1998) *J Biol Chem* **273**, 22254-22259
79. Banchio, C., Schang, L., and Vance, D. (2004) *J Biol Chem* **279**, 40220-40226
80. Williams, M., Lyu, M., Yang, Y., Lin, E., Dunbrack, R., Birren, B., Cunningham, J., and Hunter, K. (1999) *Genomics* **55**, 327-334
81. Scheijen, B., Bronk, M., van der Meer, T., De Jong, D., and Bernards, R. (2004) *J Biol Chem* **279**, 10476-10483
82. Ohtsubo, M., Yasunaga, S., Ohno, Y., Tsumura, M., Okada, S., Ishikawa, N., Shirao, K., Kikuchi, A., Nishitani, H., Kobayashi, M., and Takihara, Y. (2008) *Proc Natl Acad Sci U S A* **105**, 10396-10401
83. Bakiri, L., Lallemand, D., Bossy-Wetzel, E., and Yaniv, M. (2000) *EMBO J* **19**, 2056-2068
84. Gachon, F., Olela, F., Schaad, O., Descombes, P., and Schibler, U. (2006) *Cell Metab* **4**, 25-36
85. Kawakami, Y., Kitaura, J., Yao, L., McHenry, R., Newton, A., Kang, S., Kato, R., Leitges, M., Rawlings, D., and Kawakami, T. (2003) *Proc Natl Acad Sci U S A* **100**, 9470-9475
86. Peluso, J., Pappalardo, A., Losel, R., and Wehling, M. (2005) *Biol Reprod* **73**, 261-270
87. Rust, R., Visser, L., van der Leij, J., Harms, G., Blokzijl, T., Deloulme, J., van der Vlies, P., Kamps, W., Kok, K., Lim, M., Poppema, S., and van den Berg, A. (2005) *Br J Haematol* **131**, 596-608
88. Alpi, A., Langevin, F., Mosedale, G., Machida, Y., Dutta, A., and Patel, K. (2007) *Mol Cell Biol* **27**, 8421-8430
89. Roffers-Agarwal, J., Xanthos, J., and Miller, J. (2005) *BMC Cell Biol* **6**, 36
90. Krishnan, B., Jamry, I., and Chaplin, D. (1995) *Genomics* **30**, 53-58
91. Park, E., Han, J., Son, G., Lee, M., Chung, S., Park, S., Park, K., Lee, K., Choi, S., Seong, J., and Kim, K. (2006) *J Biol Chem* **281**, 401-409
92. Kanehira, M., Harada, Y., Takata, R., Shuin, T., Miki, T., Fujioka, T., Nakamura, Y., and Katagiri, T. (2007) *Oncogene* **26**, 6448-6455
93. Wang, Y., Zhang, Y., Han, W., Li, D., Tian, L., Yin, C., and Ma, D. (2008) *Int J Biochem Cell Biol* **40**, 909-919
94. Iwaki, D., and Fujita, T. (2005) *J Endotoxin Res* **11**, 47-50
95. Chung, E., Dews, M., Cozma, D., Yu, D., Wentzel, E., Chang, T., Schelter, J., Cleary, M., Mendell, J., and Thomas-Tikhonenko, A. (2008) *Cancer Biol Ther* **7**

96. Kusch, T., Florens, L., Macdonald, W., Swanson, S., Glaser, R., Yates, J. r., Abmayr, S., Washburn, M., and Workman, J. (2004) *Science* **306**, 2084-2087
97. Xu, J., Wu, H., Zhang, C., Cao, Y., Wang, L., Zeng, L., Ye, X., Wu, Q., Dai, J., Xie, Y., and Mao, Y. (2002) *J Hum Genet* **47**, 681-683
98. Schád, E., Farkas, A., Jékely, G., Tompa, P., and Friedrich, P. (2002) *Biochem J* **362**, 383-388
99. Gerhard, D., Wagner, L., Feingold, E., Shenmen, C., Grouse, L., Schuler, G., Klein, S., Old, S., Rasooly, R., Good, P., Guyer, M., Peck, A., Derge, J., Lipman, D., Collins, F., Jang, W., Sherry, S., Feolo, M., Misquitta, L., Lee, E., Rotmistrovsky, K., Greenhut, S., Schaefer, C., Buetow, K., Bonner, T., Haussler, D., Kent, J., Kiekhaus, M., Furey, T., Brent, M., Prange, C., Schreiber, K., Shapiro, N., Bhat, N., Hopkins, R., Hsie, F., Driscoll, T., Soares, M., Casavant, T., Scheetz, T., Brown-stein, M., Usdin, T., Toshiyuki, S., Carninci, P., Piao, Y., Dudekula, D., Ko, M., Kawakami, K., Suzuki, Y., Sugano, S., Gruber, C., Smith, M., Simmons, B., Moore, T., Waterman, R., Johnson, S., Ruan, Y., Wei, C., Mathavan, S., Gunaratne, P., Wu, J., Garcia, A., Hulyk, S., Fuh, E., Yuan, Y., Sneed, A., Kowis, C., Hodgson, A., Muzny, D., McPherson, J., Gibbs, R., Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madari, A., Young, A., Wetherby, K., Granite, S., Kwong, P., Brinkley, C., Pearson, R., Bouffard, G., Blakesly, R., Green, E., Dickson, M., Rodriguez, A., Grimwood, J., Schmutz, J., Myers, R., Butterfield, Y., Griffith, M., Griffith, O., Krzywinski, M., Liao, N., Morin, R., Morrin, R., Palmquist, D., Petrescu, A., Skalska, U., Smailus, D., Stott, J., Schnerch, A., Schein, J., Jones, S., Holt, R., Baross, A., Marra, M., Clifton, S., Makowski, K., Bosak, S., and Malek, J. (2004) *Genome Res* **14**, 2121-2127
100. Solovyan, V., Bezvenyuk, Z., Salminen, A., Austin, C., and Courtney, M. (2002) *J Biol Chem* **277**, 21458-21467
101. Tamai, S., Iida, H., Yokota, S., Sayano, T., Kiguchiya, S., Ishihara, N., Hayashi, J., Mihara, K., and Oka, T. (2008) *J Cell Sci* **121**, 2588-2600
102. Lim, C., Cater, M., Mercer, J., and La Fontaine, S. (2006) *J Biol Chem* **281**, 14006-14014
103. Suzuki, T., Terasaki, M., Takemoto-Hori, C., Hanada, T., Ueda, T., Wada, A., and Watanabe, K. (2001) *J Biol Chem* **276**, 33181-33195
104. Maeda, Y., Tsuji, K., Nifuji, A., and Noda, M. (2004) *J Cell Biochem* **93**, 337-344
105. Kawagoe, H., Kandilci, A., Kranenburg, T., and Grosveld, G. (2007) *Cancer Res* **67**, 10677-10685
106. Kang, J., Albadawi, H., Patel, V., Abbruzzese, T., Yoo, J., Austen, W. J., and Watkins, M. (2008) *J Vasc Surg* **48**, 701-708
107. Feldmann, H., Aigle, M., Aljinovic, G., André, B., Baclet, M., Barthe, C., Baur, A., Bécam, A., Biteau, N., and Boles, E. (1994) *EMBO J* **13**, 5795-5809
108. Ripperger, J., and Schibler, U. (2006) *Nat Genet* **38**, 369-374
109. Nishida, H., Suzuki, T., Tomaru, Y., and Hayashizaki, Y. (2005) *BMC Genet* **6**, 10
110. Marzluff, W., Gongidi, P., Woods, K., Jin, J., and Maltais, L. (2002) *Genomics* **80**, 487-498

111. Fan, Y., Nikitina, T., Morin-Kensicki, E., Zhao, J., Magnuson, T., Woodcock, C., and Skoultchi, A. (2003) *Mol Cell Biol* **23**, 4559-4572
112. Galvani, A., Courbeyrette, R., Agez, M., Ochsenbein, F., Mann, C., and Thuret, J. (2008) *Mol Cell Biol* **28**, 3672-3685