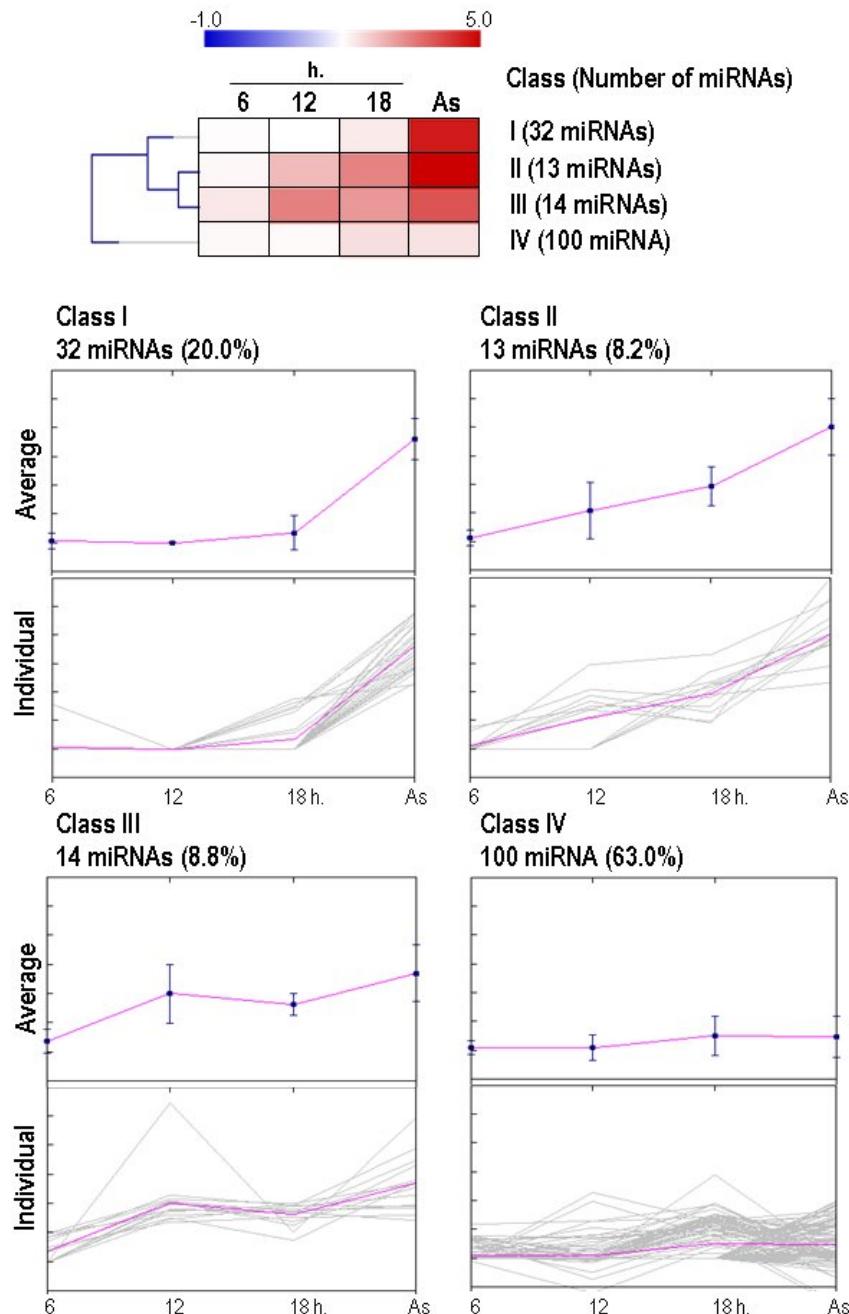


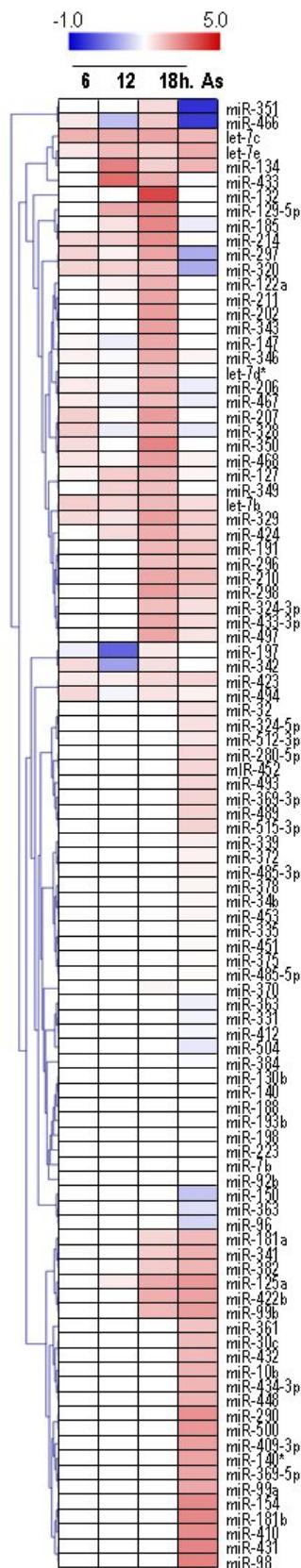
Supplementary Information

Multiple E2F-induced microRNAs prevent replicative stress in response to mitogenic signalling

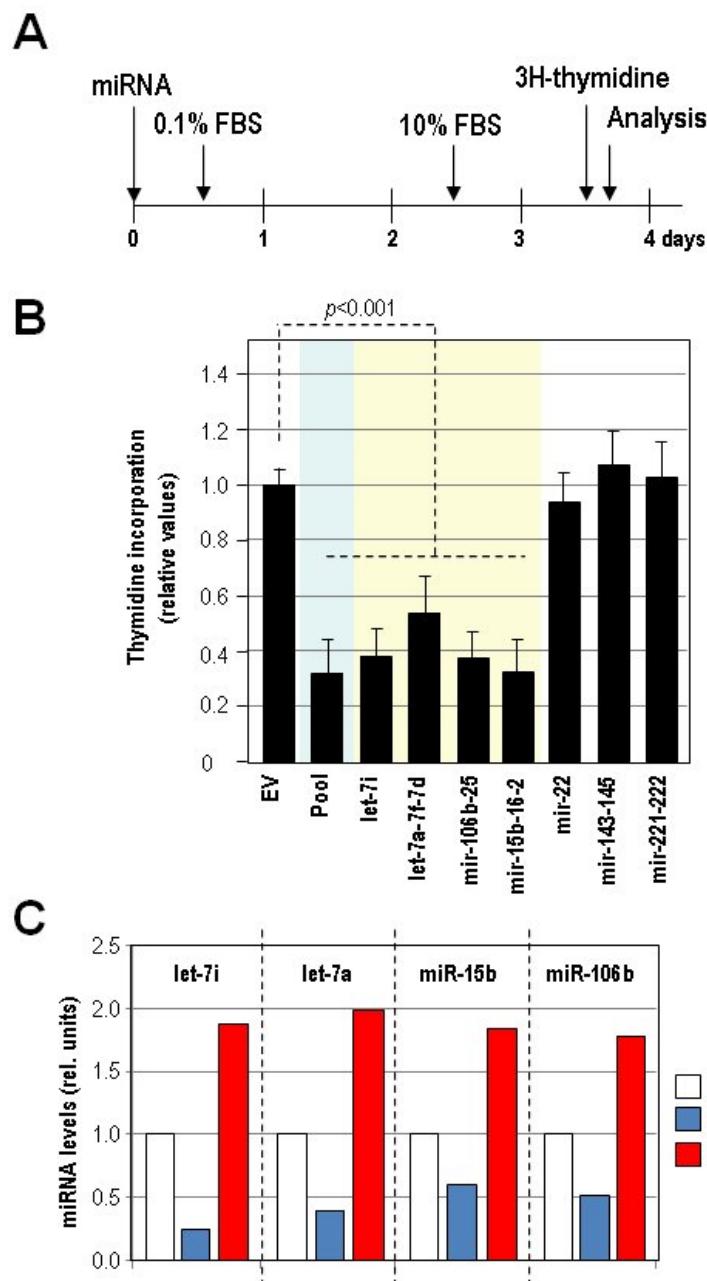
by Bueno *et al.*



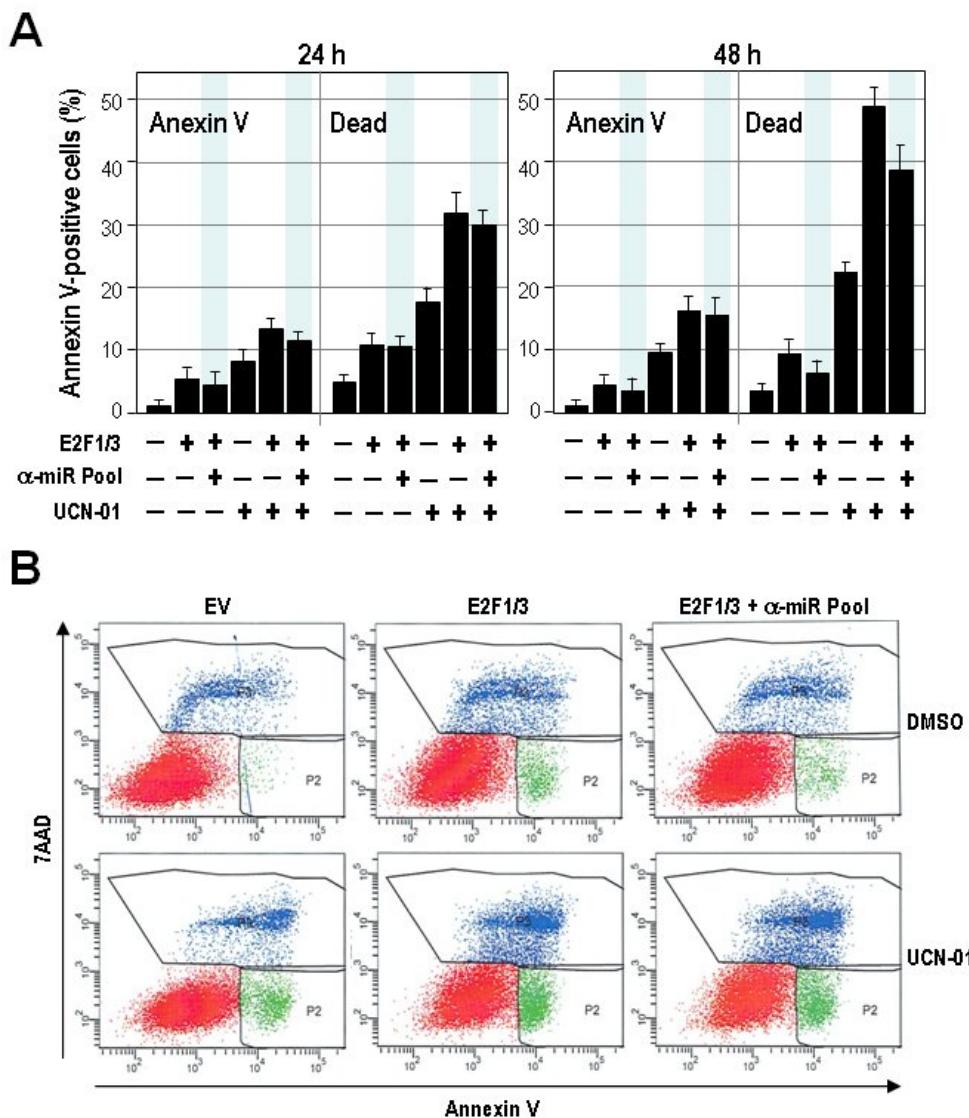
Supplementary Figure 1. SOTA analysis of miRNA expresión pattern during entry into the cell cycle and G1/S transition. A, miRNAs expression was scored 6, 12 and 18 after stimulation with serum or in asynchronously growing (As) cells. miRNAs were classified into 4 classes (I-IV) and the individual profiles are shown for the members of each of these classes.



Supplementary Figure 2. Expression profiles of individual miRNAs belonging to Class IV (not significantly induced upon stimulation with serum).



Supplementary Figure 3. **A**, Schematic representation of the protocol followed to test the effect of microRNAs during cell cycle entry. Different miRNA clusters or anti-miRNA oligonucleotides were transfected in MEFs and cells were arrested for 48 h without serum. Cells were harvested 18 h after serum stimulation in the presence of tritiated thymidine. **B**, Representative values to thymidine incorporation after expression of individual miRNA clusters or a pool of the clusters that scored positive for direct interaction with E2F (Fig. 4). All E2F-induced miRNA clusters displayed a significant inhibition of DNA replication in this assay. Other clusters that did not show interaction with E2F (*mir-22*, *mir-143-145* and *mir-221-222*) were used as a control. **C**, Real-time PCR of miRNA levels MEFs transfected with the empty vector (EV, white columns), the pool of E2F-induced miRNAs (pre-miR Pool in pMirVec plasmids; red), and the pool of inhibitors against these miRNAs (α-miR Pool; blue). A member of each of the E2F-induced clusters was analyzed. Data were normalized versus the levels of Sno202 in each condition and are represented as relative increase or decrease versus cells transfected with the EV.



Supplementary Figure 4. MEFs were transfected with vectors expressing E2F1 and E2F3 and/or anti-miR oligonucleotides against all E2F-induced miRNAs (α -miR Pool) as indicated and analyzed 24 or 48 h after transfection. These cells were also treated with 300 nM of 7-Hydroxystaurosporine (UCN-01; Sigma) just after transfection. Annexin V was detected as suggested by manufacturer's (BD Pharmingen) and dead cells with 7-Amino-actinomycin D (7-AAD) by flow cytometry. The “-” symbols indicate empty vector, scramble oligonucleotides or the absence of UCN-01. **A**, Summary of Annexin V- or 7AAD (Dead)-positive cells in the presence or absence of the indicated reagents, and **B**, representative plots of 7AAD and Annexin V, indicating that the α -miR pool partially protects from apoptosis induced by E2F1/3 and UCN-01.

Supplementary Table 1. Gene Ontology pathways enriched in the predicted targets of E2F-induced miRNAs.

Cellular process (Adjusted P-value)	miRNA targets
Multicellular organismal development (4.97E-05)	Aatf, Actc1, Acvr2a, Adm, Adrb2, Ahctf1, Akt1, Aldh5a1, Alg5, Alx4, Anpep, Apbb2, App, Aqp11, Asl, Atm, Atp7a, Bad, Bbs2, Bicc1, Birc5, Bzw2, Casp3, Cd40, Cdkn1c, Cga, Chd8, Chrd, Chrna3, Col13a1, Crb3, Cryaa, Ctfl, Cxcl13, Cyt1, Dab1, Dad1, Dclk1, Dkk4, Dilk1, Dil4, Drd3, Dvl1, E2f1, E2f5, Eda, Egfl8, Egr3, Elf5, Emx1, EphA7, Ercc2, Fam48a, Fas, Fasl, Fgf8, Fhl2, Foxa2, Foxg1, Foxh1, Foxq1, Fzd3, Gab3, Gabrr2, Gal, Gap43, Gdf11, Gjb3, Gla, Gmnn, Grhl1, Hand1, Hand2, Hmx3, Hoxc9, Hoxd10, Hnrn, Hsd11b1, Hsd17b4, Ibsp, Ick, Il25, Il6, Iqcb1, Irx5, Ivl, Kif3a, Lama3, Lgals1, Lhx8, Lmo2, Lrp6, Man2a1, Map2k1, Map2k5, Map3k1, Map3k7ip1, Mapk7, Mesdc2, Mgp, Mlf1, Mmp19, Mmp2, Msh2, Myb, Myc, Mycn, Myh9, Myt1l, Nbn, Ncapg2, Ncor2, Ndn, Neurog3, Nf2, Ngf, Nkd1, Nkx2-4, Nos2, Npnt, Nr0b1, Nr4a3, Nrtt, Ntf3, Ntn1, Ntn4, Numb, Numbl, Olfm1, Pax4, Pde3b, Pgf, Pip5k1c, Pkd1, Plac1, Plekha1, Plxna2, Plxnd1, Pnpla6, Prr15, Prtg, Rarb, Reln, Rnf6, Rogdi, Rora, Rspo3, Rttt, Sall4, Sema3f, Sema4c, Shank3, Slc18a2, Slit1, Smad7, Sorl1, Syvn1, Tacc2, Tbx5, Tcf21, Tdrd1, Tgif1, Tgm1, Th, Tnc, Tnni1, Trp53, Tssk2, Ttll7, Uchl1, Ugdh, Ung, Ush1c, Vangl1, Vegfa, Vezt, Wnt5b, Wnt8a, Xdh, Xrcc6, Zfp830
Cell cycle (5.13E-05)	2610028A01Rik, 4632434I11Rik, Aatf, Akap8, Anln, Apbb2, App, Arl2, Arl3, Atm, Avpi1, B230120H23Rik, Bin3, Birc5, Bub3, Casp3, Ccnd1, Ccnd2, Ccne1, Ccnt1, Cdc25a, Cdk7, Cdkn1c, Cep55, Cgref1, Cryaa, Dsn1, E2f1, E2f5, Esp11, Fbxo5, Fgf8, Foxg1, Fsd1, G0s2, Gas2l2, Gmnn, Haus1, Herc2, Hmg20b, Kif2b, Llgl2, Mapk7, Mcm3, Mcm7, Mlf1, Msh2, Myb, Myh9, Nbn, Ncapg2, Ncaph, Nek3, Nf2, Npat, Pcnt, Pelo, Pkd1, Plekho1, Ppp1cb, Ppp6c, Psmc3ip, Rad21, Rad51, Rad9, Rbl1, Rcc2, Rec8, Sesn1, Sesn3, Sirt2, Stk11, Tacc2, Taf1, Tdrd1, Trip13, Trp53, Tsg101, Tspyl2, Tubb5, Uhrf2, Wee1, Xrn1, Zc3hc1, Zfp830
Cellular metabolic process (8.02E-05)	1190003J15Rik, 2210018M11Rik, 2310003H01Rik, 2610028A01Rik, 2610209A20Rik, 2810006K23Rik, Aatf, Acaa2, Acad8, Aco2, Actl6a, Acvr2a, Adh5, Adora2b, Adrb2, Adrb3, Agk, Ahctf1, Ak7, Akt1, Akt3, Aktip, Aldh5a1, Aldh8a1, Alox5, Alx4, Apbb2, App, Araf, Arg2, Arv1, Asb3, Asb8, Ascc1, Asl, Atf7ip2, Atm, Atn1, Atp13a2, Atp2c1, Atp6v0a4, Atp7a, Avpi1, B230120H23Rik, BC057552, Bach2, Bad, Bcat2, Bckdk, Bmx, Camkk2, Camta1, Capza2, Capza3, Car6, Card10, Casp3, Cc2d1a, Ccne1, Ccno, Ccnt1, Ccs, Cct5, Cd40, Cdc25a, Cdk7, Cdkl1, Cdkn1c, Cdo1, Cga, Chd4, Chd8, Chrna3, Chst14, Cited4, Ckmt2, Clk3, Clp1, Cmas, Cnot1, Cnot4, Colq, Cops2, Cpeb2, Cpsf1, Crot, Cstf3, Cul2, Cyld, Cyp2f2, Cyt1, Dab1, Dapk2, Dbt, Dclk1, Dct, Ddost, Ddx20, Ddx39, Dhtkd1, Dnahc12, Dnajc4, Dnajc5b, Dnmt1, Drd3, Dus2l, Dusp28, Dyrk4, E2f1, E2f5, Echs1, Eef1b2, Efcab6, Egr3, Eif2b2, Eif2b5, Eif2c1, Eif4g2, Elac1, Elf5, Elavl7, Eme1, Emx1, Enox1, Enpp7, Entpd2, Eph4a1, Eph4a7, Ephb4, Epx, Ercc2, Ercc8, Esrp1, Ewsr1, Exosc4, Far1, Fbxl4, Fbxl5, Fbxo10, Fbxo2, Fbxo31, Fbxo5, Fbxw5, Fgd4, Fhl2, Fkrp, Fnta, Foxa2, Foxg1, Foxh1, Foxq1, Frrs1, Gale, Galk1, Galnt1, Gan, Gata1, Gatm, Gck, Gfpt1, Ggcx, Ggt1, Gipc1, Gla, Gmnn, Grhl1, Gspt1, Gtf2b, Gtf2i, Gtf3a, Gtf3c1, Hand1, Hand2, Hck, Hdac10, Herc2, Herpud2, Hif3a, Hivep1, Hmg20b, Hmox2, Hmx3, Hnf4g, Hnrnpl, Hoxc9, Hoxd10, Hsd11b1, Hsd17b1, Hsd17b4, Iars, Ick, Idh2, Ifi30, Igf2bp3, Ikbkap, Ikbkg, Il6, Imp3, Ipo9, Iqwd1, Irak4, Irf2bp2, Irx5, Isca2, Itih5, Klhl31, Lalba, Lbxcor1, Lhx8, Limk2, Lipe, Lpcat2, Maf1, Man2a1, Man2c1, Map2k1, Map2k2, Map2k5, Map3k1, Map3k2, Map3k7ip1, Map3k9, Map4k3, Mapk7, Mapk9, Mapkbp1, March8, Mark4, Mast2, Mast4, Mastl, Mbtps1, Mcm3, Mcm7, Me3, Med10, Med26, Mgst1, Mid1, Mif4gd, Mlf1, Mpg, Mrpl13, Mrpl21, Mrpl36, Mrpl48, Mrpl51, Mrps18a, Mrps18c, Mrps6, Msh2, Mst1r, Mtap, Mtif2, Mtif3, Mtm1, Mtmr7, Mxd3, Myb, Myc, Mycn, Mylk4, Myt1l, Naalad2, Nars2, Nbn, Ncoa3, Ncor2, Ndn, Ndst2, Nek3, Neurog3, Nf2, Nfat5, Nkx2-4, Nme4, Nme6, Nos2, Nosip, Npas3, Npat, Npr2, Nr0b1, Nr4a3, Nrbp1, Nrf1, Ntf3, Oaz3, Orc1l, Osbpl5, Osbpl9, Otud7a, Oxct1, P2rx4, Paf1, Papola, Papolg, Pax4, Pcbd1, Pcyt2, Pdcd11, Pdgfd, Pelo, Peo1, Pfklb1, Pfkl,

Pfkp, Pgm2, Phf5a, Phkb, Phif1, Pigg, Pip4k2c, Pip5k1c, Pla2g2a, Pmm1, Pnpla6, Poli, Polk, Polq, Polr2d, Polr3d, Polr3g, Pou6f1, Ppap2a, Ppif, Ppil3, Ppp1cb, Ppp6c, Prim1, Prkcsh, Prodh, Prpf8, Psat1, Psmc3ip, Pth, Ptk6, Ptrpu, Ptrh2, Qars, Qrs1l, Rad21, Rad51, Rad9, Rad9b, Rapgef4, Rarb, Rbbp7, Rbl1, Rdx, Reln, Rest, Rev3l, Rfx5, Rfx6, Rgr, Riok3, Rln3, Rnf125, Rnf20, Rnf4, Rnf5, Rnf6, Rora, Rpa2, Rpn2, Rpp25, Rpusd1, Rpusd2, Rpusd3, Rrm2, Rtcld1, Rtel1, Safb2, Sall4, Sbno2, Scyl1, Sds, Sertad3, Sfpq, Sfrs16, Sirt2, Sirt3, Sirt7, Skp1a, Smad6, Smad7, Smox, Smpd1, Snai3, Snapc1, Soat2, Soc56, Sorl1, Speg, Srp14, Ssh1, Ssh2, Ssrp1, Stard3, Stk11, Stk31, Stub1, Styk1, Synj1, Syvn1, Tada1l, Taf1, Taf12, Tarbp2, Tbp, Tbp1, Tbx10, Tbx5, Tcf21, Tcf25, Tcfcp2, Tcp1, Tdo2, Tex14, Tgds, Tgif1, Tgm1, Th, Thns1l2, Tle2, Tle4, Tlr1, Tm7sf2, Tnks2, Tnni3k, Tnrc6c, Trim33, Trip13, Trmu, Trp53, Tsg101, Tspyl2, Tssk2, Tsta3, Ttll4, Ttll7, Tyk2, Ube2m, Ubl3, Uchl1, Ucn3, Uhmk1, Uhrf2, Ung, Uqcrls1, Uros, Usp18, Usp25, Usp3, Usp32, Usp37, Vars2, Vps36, Vrk3, Wbp4, Wee1, Wrnip1, Xrcc6, Xrn1, Yod1, Zc3hc1, Zcchc11, Zfp287, Zfp395, Zfp509, Zfp553, Zfp583, Zfp592, Zfp677, Zmym2, Zscan12, Zyg11a

Supplementary Table 2. Enrichment in transcription factors putatively regulating E2F-induced targets.

Transcription Factor (Adjusted P-value)	miRNA targets
KROX (3.60E-08)	1700017B05Rik, 1700052N19Rik, 1810013L24Rik, 3110004L20Rik, 3110006E14Rik, 3200002M19Rik, 3300001P08Rik, 5730405I09Rik, 8430427H17Rik, 9630046K23Rik, Abcg1, Abcg4, Acvr2a, Add1, Asxl3, Atp11c, AW548124, AW549877, Axin2, Baiap2, BC025575, Bcl11b, Bcl2l11, Bcl6, Bicd2, Bmpr2, Bnip2, Braf, Btbd14a, Bzw2, C77080, Cacna1e, Camk2n1, Camk2n2, Cand1, Capn6, Cbx6, Ccnd1, Ccnd2, Ccnt2, Cdhd24, Cdk5r1, Cic, Col12a1, Col27a1, Cpd, Cpm, Cyp46a1, Chd6, Chic1, D15Ertd621e, Dll1, Dnajb5, Dnajc1, Dock3, Dpp10, Dpysl5, Dst, Dtx2, Dusp16, Dusp2, Dusp4, Dynlt3, E2f1, E2f7, Egln2, Egr2, Eif2c4, Elk3, Ephb2, Etnk2, Fbxo32, Fbxo33, Fchsd2, Fosl2, Fst, Fzd7, Ghr, Gnah, Gnaq, Golga7, Gpiap1, Gpx7, Hand2, Has3, Hectd2, Hic1, Hmga1, Hnrpa2b1, Hs2st1, Il25, Irf2bp2, Jazf1, Kcna1, Kif1b, Klf2, Kremen1, Lamc1, Lbxcor1, Lonrf3, Lrig1, Man2a1, Map3k2, Map4k4, Mapk3, Marcks, Mesdc1, Metap1, Mgll, Nat8l, Nek9, Nfatc3, Nfic, Nfic, Nlk, Nptxr, Nsd1, Ntn1, Onecut2, Ormdl3, Pappa, Pcaf, Pde10a, Pgm2l1, Phf19, Phr1, Pik3r1, Pitpnm3, Pknox1, Pld3, Pld5, Plekho6, Plekho1, Plxnd1, Pol, Pou6f1, Ppapdc2, Ppargc1b, Ppp2r5c, Pten, Ptprn21, Qk, Ralb, Rap2c, Rbbp7, Rbpms2, Rev3l, Rgs9bp, Rhoc, Rnf24, Rufy3, Rybp, Samd8, Sec14l1, Sema3a, Sema4c, Sema4g, Sh3gl2, Skil, Slc12a7, Slc24a3, Slc25a22, Slc30a1, Slitrk4, Smad5, Smad7, Socs7, Sox13, Stk40, Styx, Syt1, Tacc2, Tacc2, Tfip11, Tle4, Tmem168, Traf3, Trak2, Trhde, Uhrf2, Usp12, Usp21, Wnt3a, Wnt7a, Xkr8, Yod1, Ypel1, Ypel2, Zbtb39, Zdhhc5, Zfhx4, Zswim4, Zswim5
E2F (5.29E-05)	0610038F07Rik, 1110007L15Rik, 1110012D08Rik, 1500004A08Rik, 1700025G04Rik, 1700052N19Rik, 1810013C15Rik, 1810046J19Rik, 2010002N04Rik, 2210412D01Rik, 2310045A20Rik, 2410042D21Rik, 2700081O15Rik, 2810002I04Rik, 2810459M11Rik, 2900009I07Rik, 3110048E14Rik, 3732413I11Rik, 3930401K13Rik, 4921506J03Rik, 4931428F04Rik, 4933439F18Rik, 5031439G07Rik, 5730470L24Rik, 5730596K20Rik, 6030408C04Rik, 6430527G18Rik, A230106M20Rik, Aars, AB112350, Abcg1, Acs14, Adam9, Adamts15, Add3, Adm, Al848100, Akap8, Als2cr13, Angptl2, Ankib1, Ankrd15, Ankrd17, Ankrd52, Ankrd56, Apbb2, Aprin, Arhgap20, Arhgap26, Arid3a, Arid3b, Arl4c, Arpp19, Arrdc4, Asah3l, Asxl3, Atbf1, Atg16l1, Atg7, Atp6v1a, Atp7a, Atrnl1, B230219D22Rik, Bach1, Bag5, Bahd1, Bai2, Bambi, BC013529, BC022623, BC024868, BC025575, BC037034, BC057552, Bcat2, Bcl11b, Bcl2l11, Bicd2, Bmp2, Brms1l, Btbd10, Btg2, Btrc, C230078M08Rik, C330007P06Rik, C80913, Cab39, Calm1, Calm2, Calm3, Camk2n2, Cap1, Cask, Casp3, Casr, Cbfa2t3h, Cbln4, Cbx2, Cbx4, Cbx5, Cbx6, Cc2d1b, Ccdc128, Ccnd2, Ccnd3, Ccne1, Ccne2, Ccnj, Ccr10, Cdc25a, Cdhh2, Cdk5r1, Cdkn1a, Cdkn1c, Cdyl, Cep57, Cic, Cks1b, Clspn, Cntnap1, Col27a1, Col9a3, Corin, Cpd, Creb3l2, Creb5, Cry2, Csnk2a1, Ctdspl2, Cxcl10, Cyp26b1, Chd9, Chka, Chmp7, Chrd, D14Ertd436e, D230025D16Rik, D3Ucla1, D7Wsu128e, Dab1, Dach1, Dazap2, Dcp2, Dcun1d4, Ddhd1, Ddit4l, Ddx19b, Ddx3y, Ddx5, Derl2, Dlc1, Dlgh3, Dlst, Dll1, Dll4, Dmrt2, Dmxl2, Dnaja2, Dnaja4, Dnajb9, Dnajc16, Dock3, Dock4, Dpf2, Dpm1, Dpp6, Dpysl2, Dst, Dusp1, Dusp4, Dusp7, Dusp9, Dyrk1b, E130014J05Rik, E2f2, E2f7, E430028B21Rik, Edem1, Efnb1, EG215714, Egln2, Eif1, Eif4b, Elk4, Ell, En2, Enc1, Ensa, Eomes, Ep300, Epas1, Epb4, Epb4.1, Epb4.9, Eph4, Erc1, Esrrg, Etnk1, Etnk1, Ets1, Exoc5, F3, Faim, Fastk, Fat4, Fbxl20, Fbxl3, Fbxo21, Fbxo28, Fbxo30, Fbxo33, Fgf5, Fjx1, Fkbp1a, Fkbp5, Fkrp, Fmn1, Fmn1l, Fmr1, Fnbp4, Fndc8, Fosl1, Fosl2, Foxb1, Fras1, Frmd5, Frmd6, Frs2, Fxr1h, Fzd7, G0s2, G3bp2, Gabpb1, Gabra6, Gabrb2, Gad2, Gata2, Gata6, Gcat, Gdf6, Gdnf, Gdpd1, Gfpt2, Gga3, Ggnbp1, Glud1, Gnai3, Gnaq, Gorasp2, Gosr1, Gpatch3, Gpbp1l1, Gpr137b, Gpr173, Gpr180, Grf1, Gse1, Gsk3b, Has2, Hdgf, Hdlbp, Hivep1, Hmx3, Hnrpa1, Hnrpa2b1, Hnrpa3, Hook1, Hoxa3, Hoxb4, Hoxd1, Hrbl, Hs2st1, Igf2, Igf2bp3, Igsf4a, Il10, Il25, Impdh1, Ing3, Insr, Ints12, Ipo11, Irf2bp2, Irx2, Itga8, Itpr1, Jag1, Jak1, Kcna1, Kcnc1, Kcnh5, Kcnj2, Kcnq2, Khdrbs1, Kif1b, Kif21b, Kif5b, Klc4, Klf10, Klf9, Kpnb1, Letmd1, Limd1, Limk2, Lin52, Lmx1a, Loxl3, Lphn1, Lrba, Lrch1, Lrig1, Lrig2, Lrig3, Macf1, Man2a1, Map2k1, Map3k2, Map3k5,

Map3k7ip2, Map3k7ip3, Mapk4, Mapre1, Marcks, March8, Mast3, Mast4, Mbtps2, Mea1, Mfap3l, Mknk2, Mllt10, Mllt6, Morc3, Mpdz, Mrg1, Mrpl51, Msi2, Mtprn, Myb, Mycn, Myo18a, Myo1b, Myo1c, Myo1d, Myrip, Nanos1, Nbl1, Ndst2, Necap1, Nefm, Nek9, Neo1, Neurod1, Neurod5, Nf2, Nfatc3, Nfia, Nid2, Nkx2-2, Nkx2-3, Nox4, Nptxr, Nr2e3, Nr2f2, Nrp2, Nsd1, Nup50, Nxt2, Obfc2a, Odz2, Ogt, Onecut3, Ostm1, Otud7b, Otx1, Pafah1b1, Papd5, Pappa, Pard3b, Pcm1, Pdap1, Pdc4d, Pdgfb, Pdia6, Pdk1, Peg10, Peli3, Perq1, Pgam1, Phf19, Phf6, Phr1, Phyhipl, Plk3r1, Pim1, Pitpnm2, Pitx1, Pkd1, Pkd2, Plekhc1, Plekhn1, Pols, Ppara, Ppfia2, Ppm1d, Ppp1r3e, Ppp2r1a, Pptc7, Prdm6, Prpf38b, Prr15, Prxx1, Psd, Psd3, Pskh1, Psme3, Ptgfrn, Pvrl1, Pygo2, Rab4b, Rab9b, Rad51l3, Rap1b, Rasef, Rasl11b, Rasl12, Rb1cc1, Rbbp7, Rbm38, Rdh10, Rdx, Reln, Rev3l, Rgma, Rkh1d, Rnf128, Rnf44, Rock2, Rpa2, Rps6ka5, Rqcd1, Rreb1, Rrm2, Sash1, Satb2, Scml2, Scn8a, Scoc, Senp5, Serbp1, Sfrs11, Sgpp1, Sh2b3, Shf, Siah1a, Siah1b, Sim1, Ski, Slc10a7, Slc12a9, Slc16a12, Slc16a6, Slc16a9, Slc25a27, Slc25a32, Slc25a4, Slc2a3, Slc2a4, Slc30a1, Slc35c1, Slc35d2, Slc41a2, Slc6a4, Slc6a5, Slc8a2, Slc9a1, Slco5a1, Slitrk4, Smad6, Smad7, Smoc2, Snap23, Snf1lk2, Sntb2, Snx8, Sorl1, Sox13, Spfh2, Spin1, Spnb4, Spred3, Sqstm1, Srebf2, Srpk2, Srrp, Ssx2ip, St6galnac6, St8sia1, Stk38, Surf4, Suz12, Syde1, Sypl, Syt11, Taf5, Taf9b, Tanc1, Tarbp2, Tbl1xr1, Tbx21, Tbx3, Tceb3, Tcf4, Tcfap4, Tcfcp2, Tcta, Tera, Tfrc, Tgfbr1, Tgif, Thbs1, Thex1, Tia1, Tmem127, Tmem23, Tmem32, Tmem55b, Tnks2, Tnrc6a, Tob2, Topors, Tpp1, Tram1, Trhde, Trib2, Trip11, Trove2, Trpc7, Tsc1, Tsg101, Tspy1, Ttc14, Ttc9, Tusc2, Ubap1, Ubn1, Ubr1, Uevld, Ugcg, Uhrf2, Usp21, Usp25, Usp46, Usp49, Vamp8, Vash2, Vat1, Vegfa, Vezf1, Vps26b, Vti1b, Wdr22, Wdr43, Wee1, Wipi2, Wnk1, Wwp2, Zbtb40, Zbtb5, Zcchc14, Zcchc2, Zfp287, Zfp318, Zfp365, Zfp367, Zfp46, Zfp622, Zfp661, Zfp91, Zfyve26, Zhx1, Zhx2, Zmym2

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Supplementary Table 3. Oligonucleotides used for Chromatin Immunoprecipitation assay. F, forward; R, Reverse;

miRNA transcript	Primer ID	Sequence (5'-3')
<i>miR-23a-24-2</i>	miR-23a-F(1)	ACAGCCCTTGGTCTTGACGA
	mir-23a-R(2)	CTGCGAATCTAGAGGTAGCCT
<i>let-7i</i>	let-7i-F(3)	AACCTGAAAAGAGAACAAACGA
	let-7i-R(4)	TAGGCACGGTTGGAAGAGAG
<i>mir-143-145</i>	mir-143-145-F(7)	GCCTGGTCTACATGTGTCCTGTT
	mir-143-145-R(8)	GATCTTGGGAGTCATTGGTGAC
<i>mir-15a-16-1</i>	mir-15a-16-1-F(9)	CCTTCTTTAGCAAGCACACACA
	mir-15a-16-1-R(10)	AAAGCTTAGAACGTGCCTCCA
	mir-15a-16-1-F(11)	AGAACCGCGTCCCTTGTC
	mir-15a-16-1-R(12)	GCTCTGGATCCGCAGGTG
<i>mir-22</i>	mir-22-F(13)	GATCTCCCAGACACGGAAACA
	mir-22-R(14)	GAGCAAGAGGCAGGATCTC
<i>mir-23b-24-1</i>	mir-23b-24-1-F(15)	GCAGCACTGGAGGCTAGGTT
	mir-23b-24-1-R(16)	TTCTGAAGTGCCTGCTATTGG
<i>mir-221-222</i>	mir-221-F(17)	ATTTCAAATCAGACATTTCTGCT
	mir-221-R(18)	TGAACGAGGCAACTGTCAA
<i>mir-106b-25</i>	mir-106b-F(19)	ATCTTGGGACTGTCGTGTAAAC
	mir-106b-R(20)	CCTACCTACTGCAGCTATCTCGA
	mir-106b-F(21)	GATCTGGCAATCTTCAACGG
	mir-106b-R(22)	CGAGTCTAGATTGAATGACAAGGG
<i>mir-15b-16-2</i>	mir-15b-16-2-F(25)	ATTCGCGGGTCCCAGAAA
	mir-15b-16-2-R(26)	CTAAAATCCAAACTCGAACGGAA
<i>mir-199a-1</i>	mir-199a-1-F(29)	GCACTGTCGAGCCCTGAGTAA
	mir-199a-1-R(30)	AGCTTCGGGCCAGTGAGAC
<i>let-7a-7d</i>	let-7a-F(31)	ACACGACTTGTCCATCACCG
	let-7a-R(32)	TGACAGGCTCCTTTCCCTACT