

Table S1. Gene sets used for GSEA

ETS target set (in queried microarray dataset)

ABI2
ADAMTSL2
AHSA1
ALDH3A2
AP1B1
APBB3
APOB
ARD1A
ARF4
ARFIP2
ARHGEF7
ARL4A
ATBF1
AXIN1
BMP2K
BRCA2
BTAF1
BUD31
BZW1
C10orf4
C10orf97
C11orf56
C18orf19
C20orf77
C3orf52
C9orf142
C9orf93
CAMSAP1
CIB2
CLN3
CNOT10
COG4
COG7
COMMD1
COPB2
COX5B
CPEB4
CRB3
CREB3L2
CSNK1A1
CSNK1G1
CTTN
CTTNBP2NL
CUL4A
CXADR
CYB561
DBI
DCBLD2

MYC upregulated target set

ABCE1
ABL1
ACAT1
ACO1
Adam
ADAM9
ADK
AHCY
AIM1
AK2
AK3
AKAP1
Amd1a
APEX1
ARF5
ARHB
ARHGDI1
ASNS
ASS
ATP1B3
ATPIF1
ATR
AUH
B4GALT4
BAX
Bcap27
BCAT1
BCL11B
BCL11B
BIC
BIRC3
BLMH
BN51T
BOP1
BRCA1
BTF3
BTG1
BYS
BZRP
C1orf33
C1QBP
CAD
CBF2
CBX3
CCKBR
CCNA2
CCNB1
CCND2

DCUN1D3
DDX5
DHRS7B
DKFZP586P0123
DKFZp779O175
DMAP1
DNAJB9
DNASE1
EDEM3
ELOVL6
ERCC1
EXOC1
EYA3
FAM51A1
FAM63B
FAM83H
FANCD2
FBP1
FBXL6
FGFRL1
FLJ12529
FLJ25416
GCS1
GINS2
GLB1L
GOLGA1
GPI
GTSE1
HAT1
HDHD2
HIRIP3
HOMER1
INVS
ITFG1
ITGB4BP
JPH4
JUN
KCTD20
KCTD5
KIF14
KIF23
KIFC1
KLHDC4
KLHL20
LMAN2
LMNB2
LOC113386
LOC400506
LRRC41
MAF1
MAK10
MAP3K7IP2

CCND3
CCNE1
CCT3
CCT5
CCT6A
CDC2
CDC25A
CDC25C
CDC2L1
CDCA7
CDH4
CDK4
CDKN2A
CEB1
CENTG1
CG11738
CG12909
CG3434
CG3476
CG4802
CG5220
CG5537
CG8862
CGI-115
CGI-48
CHC1
CHK
CKS2
CKTSF1B1
CLNS1A
CRIP1
CSDA
CSRP2
CSTB
CTNNA2
CTPS
CTSC
CUL1
CXCL12
CYB5
CYCS
CYP51
D21S2056E
DBI
DDX10
DDX18
DDX21
DDX21
DDX40
DDX48
DDX5
DDX50

MAPK8IP3
MARK3
MGC15523
MON2
MRPS34
MTPN
MTR
NARS
NCBP1
NIPBL
NME1
NOC2L
NPC1
NPY
NSUN5C
OATL1
OFD1
P4HB
PAF1
PAIP2
PAK1IP1
PDCD11
PDCD6
PGM3
PHKG2
PIGF
PIGN
POLL
POMP
PPP1R9A
PRDX3
PSMB7
PSRC1
PTRH2
RAB11A
RAB2
RAPH1
RECQL5
RFC4
RFNG
RFX3
RNF6
RP11-529I10.4
RPL10
RPL27A
RPS19
SART1
SCLY
SDHD
SERBP1
SERINC1
SERP1

DDX54
DEAF1
DHFR
DHODH
DKC1
DKFZP434I2117
DKFZP564M182
DKFZP564O0463
DNAJB1
DSC3
DSCR2
DTR
DUSP2
E2-EPF
E2F1
E2F2
E2F3
E2IG3
EBNA1BP2
EEF1A1
EEF1B2
EEF1D
EEF1G
EEF2
EIF2B1
EIF2B3
EIF2S1
EIF3S10
EIF3S8
EIF3S9
EIF4A1
EIF4B
EIF4E
EIF4G1
EIF5A
EMP1
ENO1
EPHA2
EPHB2
ESRRA
EVPL
EXOSC5
EXOSC7
EXOSC7
FABP1
FACL2
FASN
FBL
FBN2
FEZ2
FGF3
FGF6

SLC25A24
SLC30A7
SLC31A1
SLU7
SMC6
SND1
SNRPN
SNX9
SRRM2
STAT1
STIL
STK38L
SUB1
TCOF1
TCTE3
TDRD6
TFCP2
TINP1
TM9SF3
TMEM147
TMEM49
TOMM40
TRIP12
TTC14
TUBB2C
UBE2V2
UBLCP1
UQCR
USMG5
VASN
WDR40A
WDR55
XRCC5
YME1L1
ZIC1
ZMPSTE24
ZNF146
ZNF23
ZNF397
ZNF593
FLJ21820
KIAA0553
PX19
ARIH2
C19orf25
CPSF3L
FAM32A
GTF2A2
HEXA
MTMR4
NUDT1
PMM2

FKBP4
FLJ10439
FLJ10709
FLJ14075
FLJ21269
FOSL1
FRDA
FTH1
FXC1
G0S2
GABA
GAMT
GAPD
GART
GCNT1
GCS1
GCSH
GFER
GFR3
GGH
GLYD
GNPAT
GPD1L
GPI
GRP58
GRSF1
GTF2F2
GTPBP4
H2AFZ
HAS2
HCLS1
HDGF
HK2
HLA-DRB5
HLCS
HMGA1
HMGE
HMGE
HMGN2
HMOX2
HNRPA1
HNRPA2B1
HNRPD
HNRPH1
HOXB3
HOXB5
HRMT1L2
HSP105B
HSPA1A
HSPA4
HSPA8
HSPA9B

RHOT2
SEC24A
TBRG1
WARS
WDR25
ZNF646
CKS1B
WDR37

HSPC111
HSPC117
HSPCAL3
HSPCB
HSPD1
HSPE1
HUMAUANTIG
IARS
ID2
IDH2
IF3X
IKBKE
IL1RL1
IMP4
IMPA2
IMPDH1
IMPDH2
IREB2
ISGF3G
ITPKB
JTV1
K-ALPHA-1
KIAA0007
KIAA0020
KIAA0179
KIAA0276
KIAA0664
KIAA1553
KNS2
LARS
LDHA
LDHB
LENEP
LIV-1
LOC112970
LOC309458
LOC56902
LOC84661
LRP8
LTA4H
MAC30
MAP4
Mat2a
MCM4
MCM6
MEST
METAP2
METTL1
MGC4308
mge
MGST1
MGST3

MIF
MINA53
MITF
MKI67IP
MMP16
MNT
mRpL10
MRPL23
MSH2
MTHFD1
MTHFD2
MXI1
MYBBP1A
na
na
NAP1L1
Nap65
NBS1
NCKAP1
NCL
NEB
NEFH
Ngfrap1
NME1
NME2
NMI
NOL5A
NOL5A
NOLA1
NOP5/NOP58
Nopp140
NPM1
NR2F1
NRAS
NRP2
NS
NUDC
NUP155
NUTF2
ODC1
OIP2
PA2G4
PAEP
PAICS
PAI-RBP1
PAX3
PBEF
PCAF
PCNA
PDCD11
PDIR
PELPI

PEMT
PES1
PFKM
PGK1
PHB
PHGDH
PIG8
PIM-1
PIM-2
PIP5K1A
POLA2
POLD1
POLD2
POLR1A
POLR2F
Polr2g
POLR2H
PPAT
PPIA
PPID
PPIF
PPP1CC
PRDX3
PRDX4
PREP
Prpg2
PRPH
PRPS2
PRS
PS11
PSA
PSMA6
PSMB1
PSPH
PTEN
PTMA
PTN
PYCR1
RAB1A
RAB9A
RAN
RANBP1
RCL
RFC2
RFC4
RNU3IP2
RPAC2
RPIA
RPL10
RPL12
RPL13
RPL19

RPL21
RPL22
RPL23
RPL26
RPL27
RPL27A
RPL3
RPL30
RPL32
RPL35
RPL36A
RPL38
RPL4
RPL41
RPL5
RPL6
RPL7
RPL7A
RPL9
RPLP1
RPLP2
Rpol-2
Rpp30
RPS12
RPS13
RPS15A
RPS16
RPS17
RPS18
RPS19
RPS20
RPS23
RPS24
RPS3
RPS4X
RPS5
RPS6KA2
RPS7
RPS8
RPS9
RRS1
RUVBL2
RYBP
S100A2
SARDH
SCAMP2
SCARB1
SCARB1
SERPINE1
SFRS1
SFRS2
SFRS7

SFXN1
SHMT1
SKD3
SLC16A1
SLC20A1
SLC25A3
SLC25A4
SLC2A1
SLC39A14
SLC6A1
SLC7A5
SMN1
SMT3H2
SNRP70
SNRPB
SNRPD2
SNRPD3
SPS2
SREBF1
SRM
SRP
SRPK1
Surf6
SURF6
SYN47
SYNGR1
TARBP1
TBL3
TCF3
TDP1
TERT
TFAM
TFDP1
TFRC
THOP1
THRA
Tim10
TIMM23
TK1
TLE4
TOP1
TP53
TRAF2
TRAP1
TXN
TXNRD1
TYMS
U3-55KD
U5-116KD
UBE2C
UCHL1
UMPK

UMPS
Uncl19
UXT
VARS1
VARS2
VDAC1
VRK1
WDR12
WDR3
YWHAE
ZNF239
ZNF330
ZNF9

Cell-Cycle regulated set

ABCA7
ABCC2
ABCC5
ABHD10
ACD
ACPP
ACYP1
ADAMTS1
ADCK2
ADCY6
ADH4
AFAP
AGPAT3
AHI1
AK3
AKAP13
AMD1
AMID
ANKRD10
ANKRD25
ANKRD40
ANLN
ANP32B
ANP32E
ANTXR1
AOC2
AOC3
AP3D1
AP3M2
AP4B1
APBA2BP
APEX2
ARHGAP19
ARHGDIB
ARL6IP
ARL6IP2
ARMC1
ASF1B
ASIP
ASPHD2
ASXL1
ATAD2
AURKA
AURKB
BAIAP2
BARD1
BBS2
BCDIN3

BCLAF1
BIRC2
BIRC5
BIVM
BLM
BMP2
BRCA1
BRD8
BRRN1
BTBD3
BTNL9
BUB1
BUB1B
BUB3
C10orf6
C12orf32
C13orf3
C14orf106
C14orf130
C14orf142
C14orf80
C15orf20
C15orf23
C16orf63
C16orf75
C1orf103
C1orf2
C1orf63
C1orf96
C20orf111
C20orf55
C21orf90
C3orf62
C4A
C4BPB
C4orf30
C6
C6orf166
C6orf55
C7orf23
C8orf1
C8orf38
C9orf100
C9orf140
CALD1
CALM2
CAPN7
CAPS
CARF
CASP2
CASP3
CASP8AP2

CBX3
CCDC14
CCDC84
CCDC99
CCNA2
CCNB2
CCND1
CCNE1
CCNE2
CCNF
CCRK
CD24
CD97
CDC16
CDC2
CDC25A
CDC25B
CDC25C
CDC27
CDC42
CDC42EP1
CDC42EP4
CDC45L
CDC6
CDC7
CDCA1
CDCA2
CDCA3
CDCA5
CDCA7
CDCA8
CDH24
CDK7
CDKL5
CDKN1B
CDKN2C
CDKN2D
CDKN3
CDR2
CENPA
CENPE
CENPF
CENPL
CENPM
CENPQ
CENTB5
CEP350
CEP55
CEP57
CEP70
CFD
CFLAR

CHAF1A
CHAF1B
CHEK2
ChGn
CIITA
CIT
CKAP2
CKAP2L
CKAP5
CKS1B
CKS2
CLSPN
CNIH4
CNOT10
CNTROB
COL7A1
CPNE8
CPXM
CRLS1
CROP
CRYBA1
CSNK1G1
CTNND1
CTR9
CXCL14
CYB5R2
D21S2056E
DCC1
DCP1A
DCTN6
DCUN1D3
DDX12
DEPDC1B
DEPDC7
DET1
DEXI
DGCR8
DHFR
DHFR1
DHX8
DKC1
DKFZp313A2432
DKFZP434A0131
DKFZp762E1312
DLG7
DMTF1
DMXL2
DNA2L
DNAJA1
DNAJB1
DNAJB4
DNAJB6

DNAJB9
DNAJC3
DNAJC6
DONSON
DR1
DSCR1
DSP
DTL
DUSP4
DYNLL1
DZIP3
E2F2
E2F5
EBI3
ECT2
EFHC1
EIF4EBP2
EIF4G2
Eiis1
ELP3
ENOSF1
ENTPD5
ERN2
ESCO2
ESPL1
EXO1
EZH2
FADD
FAM105B
FAM111B
FAM60A
FAM64A
FAM7A2
FAM83D
FANCA
FANCD2
FANCG
FBXL20
FEN1
FLAD1
FLJ10154
FLJ11021
FLJ13231
FLJ20516
FLJ20699
FLJ22624
FLJ25416
FLJ32810
FLJ35740
FLJ38973
FLJ39349
FLJ39660

FOXM1
FREQ
FRZB
FUSIP1
FXR1
FYN
FZR1
G3BP
GABPB2
GADD45A
GAS1
GAS2L3
GAS6
GATA2
GCLM
GDF15
GINS2
GINS3
GLI1
GMNN
GNB1
GOLGA8A
GOT1
GPR126
GPSM2
GRK6
GRPEL1
GTF3C4
GTSE1
H1FO
H2AFX
H2-ALPHA
hCAP-D3
HCFC1
HELLS
HERPUD2
HIF1A
HINT3
HIPK2
HIST1H2AC
HIST1H2AM
HIST1H2BG
HIST1H4B
HIST1H4C
HIST1H4E
HIST1H4H
HIST2H2BE
HIST3H2A
HKR1
HLA-DOA
HLA-DRA
HLA-E

HLXB9
HMG20B
HMGB2
HMGB3
HMGCR
HMMR
HN1
HORMAD1
HOXB5
HP1BP3
HPS4
HRAS
HRB
HRSP12
HS2ST1
HSPA1L
HSPA2
HSPA8
HSPB8
HSPC148
HSPC157
HSUP1
IFIT1
IFIT2
IFNAR1
IGHG1
ILF2
INADL
INDO
INSIG2
INSM1
INSR
INTS7
INTS8
IRAK1BP1
ITFG1
ITGB3BP
ITPR1
IVNS1ABP
JARID1B
JMJD1C
JMJD2A
KARCA1
KATNA1
KBTBD2
KCNC4
KCTD2
KCTD9
KDELC1
KDELR2
KIAA0182
KIAA0586

KIAA0738
KIAA0802
KIAA0841
KIAA1008
KIAA1333
KIAA1370
KIAA1524
KIAA1529
KIAA1598
KIAA1641
KIAA1794
KIAA1833
KIF11
KIF14
KIF22
KIF23
KIF2C
KIF5B
KIFC1
KLF6
KLF9
KLHL23
KNTC2
KPNA2
KRAS
LARP1
LARP7
LASS6
LBR
LIPH
LIX1L
LMNA
LMNB1
LMO4
LNPEP
LOC132241
LOC134121
LOC146517
LOC153222
LOC161527
LOC199800
LOC283596
LOC283624
LOC285346
LOC339287
LOC348801
LOC388114
LOC400879
LOC400986
LOC441052
LOC51334
LOC642775

LOC642981
LOC643224
LOC653464
LOC653820
LOC90110
LOC90624
LPP
LRCH1
LRRC17
LRRC54
LTBP3
LYAR
M6PRBP1
MAD2L1
MALAT1
MAN1A2
MAP2K6
MAP3K2
MAP3K7IP2
MAPK13
MASTL
MATN2
MBOAT1
MCM2
MCM4
MCM5
MCM6
MCM8
MDM1
MDS025
ME3
MED31
MELK
MET
MGAT2
MGC10911
MICA
MID1
MKI67
MLF1IP
MLLT4
MLLT6
MND1
MNT
MORF4L2
MPHOSPH1
MRPL19
MRPS2
MSH2
MTPN
MUC1
MULK

MYCBP2
MZF1
NAB1
NALP2
NASP
NCF1
NCOA5
NDE1
NEIL3
NEK2
NFE2L2
NFIA
NFIC
NFKBIL2
NIPBL
NKTR
NMB
NNMT
NOS1
NPAT
NR3C1
NR5A2
NRD1
NSUN3
NSUN5C
NT5DC1
NUCKS1
NUDCD2
NUMA1
NUP160
NUP35
NUP37
NUP43
NUSAP1
NY-SAR-48
ODF2
OGT
OIT3
OLR1
ORC1L
ORC3L
OSBPL6
PANK2
PASK
PBK
PCAF
PCF11
PCNA
PDXP
PHF15
PHTF1
PHTF2

PIK3CD
PILRB
PIP5K1B
PKNOX1
PLCXD1
PLK1
PLK2
PMS1
PNN
POLD3
POLQ
PPP1R10
PPP1R2
PPP2CA
PPP2R2A
PRC1
PRIM1
PRIM2A
PRPSAP1
PRR11
PRR5
PSCD2
PSCD3
PSEN1
PSMD11
PSRC1
PTAR1
PTGER3
PTMS
PTP4A1
PTPN9
PTTG1
PWP1
QRICH1
RAB23
RAB3A
RAD18
RAD21
RAD51
RAD51AP1
RAD51C
RAD54L
RAN
RANGAP1
RASGEF1A
RBBP8
RBM8A
RBPSUH
RCCD1
RDH11
RECQL4
REEP1

RERE
RFC4
RGS3
RHEB
RHOBTB3
RHPN1
RMI1
RNF113A
RNF126
RNF141
RNF36
RP11-11C5.2
RP11-93B10.1
RPA2
RPL13A
RPL23AP7
RRM1
RRM2
RUNX1
SAP30
SAP30BP
SAPS3
SCML1
SDC1
SEPN1
SERPINB3
SFPQ
SFRS3
SFRS5
SFRS7
SGOL2
SH3GL2
SHC1
SHCBP1
SKIP
SKP2
SLBP
SLC17A2
SLC22A3
SLC25A36
SLC38A2
SLC39A10
SLC44A2
SLC9A3
SLIT2
SMARCB1
SMARCD1
SMC4
SMTN
SNUPN
SORL1
SP1

SPAG5
SPIN3
SRD5A1
SRF
SRRM1L
SS18
SSR3
ST5
STAG1
STAT1
STAT5B
STIL
STX5
SUCLG2
SUV420H1
SUZ12P
SV2B
TACC3
TAF12
TAF15
TDRD6
TFAP2A
TFF3
TGIF
TICAM2
TIMP1
TLE3
TMCC1
TMCO4
TMEM132A
TMEM138
TMEM140
TMEM49
TMEM99
TncRNA
TNFAIP8L1
TNPO1
TNPO2
TOB2
TOMM34
TOP2A
TOP3A
TOPBP1
TPX2
TRA2A
TRAIP
TREX1
TRIM26
TRIM45
TRIM52
TRIP13
TROAP

TSC22D1
TSG101
TSN
TTC31
TTF2
TTK
TTLL7
TUBA1
TUBA3
TUBB
TUBB2B
TUBB2C
TUBD1
TULP4
TXNDC9
TYMS
UACA
UBE2C
UBE2D3
UBE2T
UBL3
UBQLN2
UBXD5
UHRF1
UNC5CL
UNG
USP1
USP16
USP53
USP6NL
VANGL1
VCAM1
VCL
VEGFC
VPS25
VPS37C
VPS72
WDR18
WDR51A
WDR62
WDR68
WDR90
WIBG
WIRE
WSB1
WWC1
YWHAH
YY1
ZBTB7A
ZCCHC10
ZF
ZFX

ZMYM1
ZMYND19
ZNF141
ZNF207
ZNF217
ZNF281
ZNF286
ZNF414
ZNF451
ZNF521
ZNF587
ZNF593
ZNFX1
ZNHIT2
ZPBP
ZRANB2
ZSCAN5
ZWINT