
Table S3. Estrogen-responsive genes from ERGDB³⁹

Estrogen-responsive gene

ACO2

BIK

BAIAP2L2

COMT

C1QTNF6

DGCR6

LGALS1

LIMK2

LIF

MCM5

PDGFB

PES1

PHF5A

RANBP1

SMARCB1

TCF20

TIMP3

TOP3B

XRCC6

YWHAH

APP

ABCG1

BRWD1

CRYAA

CXADR

CHODL

DSCAM

HUNK

ITGB2

NCAM2

NRIP1

RUNX1

SIM2

TFF1
TFF3
TTC3
ATP9A
AHCY
BCL2L1
BMP2
BCAS1
CDH4
CEBPB
CSNK2A1
E2F1
GDF5
ID1
KIF3B
MYBL2
PCNA
PLTP
PSMA7
PREX1
PARD6B
RALY
SNRPB
SEC23B
SRC
SNAP25
TCEA2
TCF15
THBD
TPX2
UBE2C
WISP2
ZNF217
APOE
ANGPTL4

ASF1B
BLVRB
BSG
CAPNS1
CYP2B6
CEACAM6
CCNE1
C19ORF24
C19ORF33
CEACAM1
EPOR
ERF
EGLN2
F2RL3
FKBP8
FXD5
GNG7
GADD45B
GDF15
HCN2
ICAM1
IER2
INSL3
JUNB
KIR3DL2
KLK10
KLK4
NOTCH3
NR2F6
PRKCSH
PSMC4
PSMD8
PVR
PDCD5
SLC1A5

SNRPA
TGFB1
USF2
UHRF1
UBE2S
ZFP36
ZNF17
ZNF230
ZNF571
AQP4
APCDD1
BCL2
CDH2
LAMA3
NFATC1
PMAIP1
PTPN2
RBBP8
RAB31
SMAD2
TXNL4A
ACLY
ACTG1
APOH
ATP2A3
AKAP1
AURKB
ALOX15
AMZ2
BIRC5
BRCA1
BRIP1
C1QBP
CDC6
CNP

CCL2
CCL5
COPS3
CDK5R1
COL1A1
CSF3
CD300LF
DDX5
EIF5A
ENO3
ERBB2
GFAP
GALK1
GUCY2D
H3F3B
HGS
HS3ST3A1
IGFBP4
ITGA3
ITGAE
KPNB1
KPNA2
KRT19
KRT23
MAP2K6
MAP2K4
NME1
NME2
NUP88
NGFR
PMP22
PSMB3
PSMB6
PSMD11
PSME3

RAB5C
RAD51C
RARA
RPS6KB1
RASD1
RAPGEFL1
SOX9
SCARF1
SOCS3
SLC16A6
SYNGR2
SLC9A3R1
SSTR2
SDK2
SLC35B1
TK1
TOP2A
TP53
TUBG1
TOB1
UBTF
WNT9B
WSB1
AARS
ABCA3
AMFR
ACSM3
AXIN1
CDH11
CREBBP
CDIPT
DNASE1
DNAJA2
DPEP1
FOXF1

FOXC2
GOT2
HBA1
HBQ1
HMOX2
HSD11B2
IRX5
KIF22
LITAF
MT1B
MT1L
MT1X
MYH11
NFATC3
NUP93
NETO2
PLK1
PKMYT1
RBBP6
RBL2
RPS2
RAB26
SPN
SULT1A1
SLC7A5
SF3B3
SSTR5
TNFRSF12A
YPEL3
ZNF267
ANXA2
ARNT2
ABHD2
ACTC1
ANP32A

ALDH1A2
BUB1B
CA12
CYP1A1
CORO2B
CSNK1G1
CYP19A1
DUT
FBN1
FGF7
GATM
HDC
IDH2
IGF1R
IPW
ISG20
IQGAP1
LRRC49
MEF2A
MYO1E
MESDC2
NTRK3
NDN
NUSAP1
NR2F2
PCSK6
PPIB
PRC1
RAD51
SMAD6
SORD
SPRED1
THBS1
ACTN1
CALM1

DHRS2
DAD1
DIO2
EIF2S1
EIF5
EML1
ERH
ESR2
ESRRB
FOS
HIF1A
ITPK1
MTHFD1
MAX
NFKBIA
NUMB
NDRG2
PCK2
PTGER2
PNP
SERPINA3
SERPINA6
SERPINA5
SERPINA1
SSTR1
TGFB3
TEP1
VRK1
WARS
ZFP36L1
ZFYVE26
CUL4A
CCNA1
EFNB2
ELF1

FLT1
FARP1
GPR18
GTF3A
GJB2
HMGB1
HTR2A
ITGBL1
IRG1
ITM2B
KL
LHFP
MAB21L1
NBEA
POU4F1
RFC3
RASA3
RB1
SLC7A1
SPRY2
TFDP1
ASCL1
ACVR1B
ACVRL1
BCAT1
BICD1
CACNA1C
CD69
CCT2
CDK2AP1
CCND2
CDKN1B
CDK2
DDIT3
DUSP6

ENO2
ERBB3
FKBP4
FOXM1
FGF6
FOXJ2
GAPDH
GALNT4
GPRC5A
GLYCAM1
HOXC6
HSD17B6
HIP1R
HOXC8
HSPB8
IFNG
ITGA5
ITPR2
IGF1
KRT6B
KRT7
KRT8
KITLG
KCNA5
KCNJ8
KRAS
LUM
MARS
MGP
MVK
MYF5
NR4A1
NTS
NR2C1
OLR1

ORMDL2
PA2G4
PDE3A
PKP2
PTPRO
PRIM1
PHLDA1
PAWR
RAN
RFC5
RERG
SCNN1A
SHMT2
SOCS2
SLC16A7
STRAP
SCARB1
SYT1
SLC38A1
TMPO
TPI1
TIMELESS
TMED2
UNG
ULK1
VAMP1
VDR
WNT1
WNT10B
WSB2
XPOT
ACRV1
ATP5L
ADM
BANF1

CCND1
CD44
CTNND1
CTSD
CALCA
CHEK1
DLG2
EEF1G
EHF
FXVD2
FEN1
FTH1
FGF4
FUT4
F2
H2AFX
HBG1
HBG2
HSPA8
HYOU1
IGF2
LDHA
LUZP2
MMP3
MARK2
MTNR1B
NUCB2
NXF1
P2RY6
PGR
PRSS23
POLA2
POU2F3
RPL27A
RPS3

RRM1
RBM14
SLC22A18AS
SAA1
SLC1A2
SLC3A2
SPCS2
STIP1
SERPING1
SCT
SYTL2
SYT8
SYT7
TCN1
TCIRG1
TAF10
VEGFB
VPS37C
YIF1A
ZBTB16
ADRB1
ARL3
AKR1C4
ADRA2A
ASB13
BNIP3
BAMBI
BLNK
CREM
CXCL12
CUBN
CYP26A1
DOCK1
DDIT4
EGR2

FGFR2
GFRA1
GOT1
GSTO1
HK1
IDI1
ITIH2
IFIT1
IFIT3
KLF6
KIF11
KCNIP2
LRRC20
MAP3K8
MRC1
NRP1
NOLC1
NPM3
PFKP
PGAM1
PLAU
PSAP
PPIF
PARD3
RET
RHOBTB1
RAB18
SVIL
ZNF33A
ZWINT
ANXA1
ANP32B
ABCA1
AK1
AQP3

BAG1
B4GALT1
CKS2
COL15A1
COL5A1
COQ4
C9ORF3
DNAJA1
ENG
FBP1
FNBP1
GAS1
HSPA5
IARS
IFNA14
IFNB1
KLF4
LCN2
MPDZ
NR4A3
NFIL3
OLFM1
OSTF1
PGM5
PTGS1
PLAA
PTGES
PTGDS
RFX3
RXRA
RNF38
SET
STXBP1
SSNA1
SEC61B

SUSD3
TNFSF8
TNC
TEK
UGCG
WNK2
ARFGEF1
ARC
ATAD2
ADRA1A
AZIN1
ANGPT1
BIN3
CA2
CLU
COX6C
CRH
CALB1
CA13
DEFA4
DUSP4
DLC1
EGR3
EIF4EBP1
ENY2
FDFT1
FABP4
GEM
GNRH1
GRHL2
KLF10
LY6E
LPL
MCM4
MMP16

MYBL1
MYC
MATN2
NDRG1
NCOA2
OPRK1
PCM1
PDGFRL
PLAT
PTDSS1
PNOC
PKIA
PBK
PLEKHF2
SFRP1
ST3GAL1
SLA
SLC7A2
SQLE
STAR
STC1
STK3
ST18
SNAI2
SOX17
SLC39A14
SLC39A4
TCEA1
TRPS1
TNFRSF11B
TP53INP1
ZNF703
ACHE
ADCY1
ASNS

ABCB1
AGR2
AQP1
ANLN
CALCR
CAV1
CDK6
CHN2
CPA2
CLDN4
CBX3
CRCP
CYCS
CREB3L2
EGFR
EPO
EPHB4
EZH2
GARS
GRB10
GTF2I
HOXA7
HSPB1
HBP1
H2AFV
IL6
INHBA
INMT
KCND2
LEP
MCM7
MEST
MEOX2
NUDT1
NOS3

NRF1
POLD2
PPIA
PTPN12
PDIA4
PEG10
PRKAG2
RPA3
RAMP3
RAC1
SLC26A3
SERPINE1
SP4
SEMA3C
SEC61G
SND1
SMURF1
SFRP4
TAC1
TFPI2
TRIM24
TES
TRIP6
TSPAN13
TRA2A
TSC22D4
THAP5
VGF
ZDHHC4
AIM1
AMD1
ARG1
AKAP12
BAK1
CDKN1A

CGA
CNR1
CRISP3
CITED2
CTGF
CNKSR3
EDN1
EEF1A1
ESR1
ELOVL2
ELOVL5
FKBP5
FOXC1
FRK
FYN
GJA1
GABRR1
HIST1H4C
HIST1H3C
HIST1H2AB
HIST1H2BB
JARID2
MARCKS
MAN1A1
MCM3
ME1
MYB
MTRF1L
PGC
PIM1
PKIB
PTPRK
PRDM1
PRIM2
PBOV1

RPL10A
RUNX2
RANBP9
SLC29A1
SERPINB6
SYNCRIP
THBS2
TPBG
TPD52L1
TULP1
ARSB
ADRB2
ANKH
BTF3
CCNB1
CDH18
CTNND2
CXCL14
CSF1R
CCT5
DPYSL3
DUSP1
ENC1
EGR1
ELL2
F12
FLT4
FGF18
FST
FAM53C
GABRP
GTF2H2
GDNF
GZMA
HBEGF

HMGCR
HMMR
HSPA4
HTR1A
IL12B
IRF1
KIF20A
LMAN2
MAP1B
MSX2
NPM1
NEUROG1
N4BP3
OSMR
PIK3R1
PITX1
PPP2CA
PRLR
PTTG1
PLK2
PAM
SLC26A2
SMAD5
SGCD
SLC12A2
ST8SIA4
STC2
SPARC
SRD5A1
SNX24
TNPO1
TAF9
TBCA
TCF7
TRIP13

TCERG1
TGFB1
TMED7
WDR41
AFP
ALB
ANXA3
AREG
ART3
ABCE1
ANKRD17
CCNG2
CLCN3
CTBP1
CXCL1
CXCL2
CPE
CXCL10
DCK
EXOSC9
FGB
GNRHR
GRIA2
GRID2
GUCY1B3
H2AFZ
HMGB2
HPGD
ING2
INPP4B
IGJ
KDR
KIT
KCNIP4
MAD2L1

MXD4
MSX1
MAPK10
NPY1R
PPBP
PCGF3
PAICS
PDLIM5
PTTG2
PKD2
PROL1
SCARB2
S100P
SPRY1
SFRP2
SLC39A8
SLC25A4
TLR2
TSPAN5
TACC3
AHSG
ALCAM
APOD
ATP2B2
ABCC5
ABHD5
ATP13A3
BCL6
CBLB
CD86
CCR1
CCR2
CP
CLDN1
CCR5

CCK
EDEM1
EPHA3
FOXP1
GNL3
HES1
IMPDH2
IFRD2
KCNAB1
KCNMB3
LTF
LRRFIP2
LAMB2
LRCH3
LRRC15
MBNL1
MCM2
MASP1
MRPL3
MME
OXTR
PLOD2
PRKCD
PTPRG
PIK3CA
PPARG
PTX3
PDZRN3
PHF7
PHLDB2
RPSA
RPL15
RPL14
ROBO1
RARB

SATB1
SSR3
SEMA3B
SH3BP5
SERPINI1
STAB1
SEC61A1
SEMA5B
SNRK
THPO
TKT
TMF1
TNFSF10
THRB
UMPS
WNT5A
WNT7A
ADCY3
ALPP
APOB
ATP5G3
AGPS
ACTG2
ANXA4
ANKRD44
BZW1
BCL2L11
CALM2
CCNT2
CD8A
CENPA
CPS1
CTNNA2
CYP1B1
CCT7

CCT4
CLK1
COL3A1
COL6A3
CDCA7
COX5B
COMMD1
DTYMK
DBI
DNER
EEF1B2
EPHA4
EFEMP1
EPB41L5
FOSL2
FEZ2
FAM84A
GFPT1
GPD2
GREB1
HOXD4
HSPD1
HAT1
HDAC4
HSPE1
HPCAL1
ID2
IGFBP5
IL1R1
INHBB
IRS1
ITGAV
IL1R2
IL1RL2
ITGB1BP1

IGFBP2
ITGA4
ITGA6
KYNU
KCNK3
KHK
KIF3C
MXD1
MYO1B
MTHFD2
MCM6
NEB
NRP2
PDCD1
PRKCE
PSMD1
PTMA
PAX8
PTPN18
RAB1A
RRM2
RAMP1
RIF1
RSAD2

2-Sep

SLC1A4
SNRPG
SOS1
SMYD1
SLC20A1
SLC8A1
SERPINE2
TFPI
TGFA
TSN

TMSB10
TRIB2
UBE2E3
WDR43
WDFY1
ZFP36L2
ADORA1
ALPL
APOA2
ATF3
ANXA9
ACTA1
ARHGEF2
BTG2
BCAN
BMP8A
BMP8B
CD34
CD58
CDC20
COPA
CRP
CYP2J2
CELSR2
CYR61
CCT3
C1QB
CFH
CTSS
CD52
CLIC4
CACYBP
CKS1B
C1ORF123
C1ORF68

DHCR24
DDOST
DVL1
ECE1
EFNA1
ENO1
EXOSC10
EXO1
EDN2
ENAH
FAIM3
F3
FAM72A
GABRD
GCLM
GNB1
GADD45A
GBP2
GSTM1
GSTM2
GREM2
H3F3A
HSPA6
HAX1
HMGCS2
HEATR1
IFI16
ILF2
IRF6
IL6R
JUN
KCND3
KCNK2
KIF2C
KIFAP3

LEPR
MPL
MUC1
MKNK1
MAPKAPK2

2-Mar

MRPS14
NFIA
NHLH2
NRAS
NTNG1
NASP
PARP1
PDE4B
PDZK1
PLXNA2
PSEN2
PSMB4
PTGER3
PTGS2
PIK3R3
PTPRU
PBX1
PADI1
PIGR
PHGDH
RHOC
RERE
RGS2
RPS6KA1
RSC1A1
RBM8A
RPA2
RUSC1
RHOU

STMN1
S100A9
S100A10
SFPQ
SLC2A1
SNRPE
SELENBP1
SF3A3
SKI
SLC16A1
SPRR2A
SPRR2B
SPRR2E
SPRR2F
SPRR2G
SRM
SSBP3
SCP2
SEMA4A
STX12
TACSTD2
TPM3
TIMM17A
TXNIP
TBX15
UBE2T
UOX
VCAM1
WNT3A
WNT4
YBX1
YARS