

Gene symbol	Category
ACAN	ECM
ADAM10	ECM remodeling-related
ADAM11	ECM remodeling-related
ADAM12	ECM remodeling-related
ADAM15	ECM remodeling-related
ADAM17	ECM remodeling-related
ADAM18	ECM remodeling-related
ADAM19	ECM remodeling-related
ADAM2	ECM remodeling-related
ADAM20	ECM remodeling-related
ADAM21	ECM remodeling-related
ADAM22	ECM remodeling-related
ADAM23	ECM remodeling-related
ADAM28	ECM remodeling-related
ADAM29	ECM remodeling-related
ADAM3	ECM remodeling-related
ADAM30	ECM remodeling-related
ADAM5	ECM remodeling-related
ADAM7	ECM remodeling-related
ADAM8	ECM remodeling-related
ADAM9	ECM remodeling-related
ADAMTS1	ECM remodeling-related
ADAMTS10	ECM remodeling-related
ADAMTS12	ECM remodeling-related
ADAMTS13	ECM remodeling-related
ADAMTS14	ECM remodeling-related
ADAMTS15	ECM remodeling-related
ADAMTS16	ECM remodeling-related
ADAMTS17	ECM remodeling-related
ADAMTS18	ECM remodeling-related
ADAMTS19	ECM remodeling-related
ADAMTS2	ECM remodeling-related
ADAMTS20	ECM remodeling-related
ADAMTS3	ECM remodeling-related
ADAMTS4	ECM remodeling-related
ADAMTS5	ECM remodeling-related
ADAMTS6	ECM remodeling-related
ADAMTS7	ECM remodeling-related
ADAMTS8	ECM remodeling-related
ADAMTS9	ECM remodeling-related
ADAMTSL1	ECM remodeling-related
ADAMTSL2	ECM remodeling-related
ADAMTSL3	ECM remodeling-related
ADAMTSL4	ECM remodeling-related
ADAMTSL5	ECM remodeling-related
AGRIN	ECM
ALCAM	Cell-cell adhesion
ANGPT1	Soluble factors and receptors
ANGPT2	Soluble factors and receptors
ANGPT4	Soluble factors and receptors
ANGPTL1	Soluble factors and receptors
ANGPTL2	Soluble factors and receptors
ANGPTL3	Soluble factors and receptors
ANGPTL4	Soluble factors and receptors
ANGPTL7	Soluble factors and receptors

AREG	Soluble factors and receptors
ATRN	Soluble factors and receptors
ATRN1	Soluble factors and receptors
BAI1	Soluble factors and receptors
BAI2	Soluble factors and receptors
BAI3	Soluble factors and receptors
BCAN	ECM
BEHAB	ECM
BGLAP	ECM remodeling-related
BGN	ECM
BMP1	ECM remodeling-related
BMP10	Soluble factors and receptors
BMP15	Soluble factors and receptors
BMP2	Soluble factors and receptors
BMP3	Soluble factors and receptors
BMP4	Soluble factors and receptors
BMP5	Soluble factors and receptors
BMP6	Soluble factors and receptors
BMP7	Soluble factors and receptors
BMP8A	Soluble factors and receptors
BMP8B	Soluble factors and receptors
BMPR1	Soluble factors and receptors
BMPR2	Soluble factors and receptors
BTC	Soluble factors and receptors
C6	Soluble factors and receptors
C7	Soluble factors and receptors
C8A	Soluble factors and receptors
C9	Soluble factors and receptors
C9orf8	ECM remodeling-related
C9orf94	ECM remodeling-related
CCL1	Soluble factors and receptors
CCL10	Soluble factors and receptors
CCL11	Soluble factors and receptors
CCL12	Soluble factors and receptors
CCL2	Soluble factors and receptors
CCL22	Soluble factors and receptors
CCL23	Soluble factors and receptors
CCL24	Soluble factors and receptors
CCL25	Soluble factors and receptors
CCL26	Soluble factors and receptors
CCL27	Soluble factors and receptors
CCL28	Soluble factors and receptors
CCL3	Soluble factors and receptors
CCL4	Soluble factors and receptors
CCL5	Soluble factors and receptors
CCL6	Soluble factors and receptors
CCL7	Soluble factors and receptors
CCL8	Soluble factors and receptors
CCL9	Soluble factors and receptors
CCR1	Soluble factors and receptors
CCR10	Soluble factors and receptors
CCR2	Soluble factors and receptors
CCR3	Soluble factors and receptors
CCR4	Soluble factors and receptors
CCR5	Soluble factors and receptors
CCR6	Soluble factors and receptors

CCR7 Soluble factors and receptors
CCR8 Soluble factors and receptors
CCR9 Soluble factors and receptors
CD120 Soluble factors and receptors
CD146 cell-cell adhesion
CD153 Soluble factors and receptors
CD154 Soluble factors and receptors
CD164 cell-cell adhesion
CD22 cell-cell adhesion
CD24 cell-cell adhesion
CD27 Soluble factors and receptors
CD40 Soluble factors and receptors

CD44 Cell-cell adhesion
CD44 cell-cell adhesion
CD70 Soluble factors and receptors
CDH1 cell-cell adhesion
CDH11 cell-cell adhesion
CDH12 cell-cell adhesion
CDH13 cell-cell adhesion
CDH15 cell-cell adhesion
CDH16 cell-cell adhesion
CDH17 cell-cell adhesion
CDH2 cell-cell adhesion
CDH3 cell-cell adhesion
CDH4 cell-cell adhesion
CDH5 cell-cell adhesion
CDH6 cell-cell adhesion
CDH8 cell-cell adhesion
CEACAM1 cell-cell adhesion
CEACAM16 cell-cell adhesion
CEACAM18 cell-cell adhesion
CEACAM19 cell-cell adhesion
CEACAM20 cell-cell adhesion
CEACAM21 cell-cell adhesion
CEACAM3 cell-cell adhesion
CEACAM4 cell-cell adhesion
CEACAM5 cell-cell adhesion
CEACAM6 cell-cell adhesion
CEACAM7 cell-cell adhesion
CEACAM8 cell-cell adhesion
CELSR1 cell-cell adhesion
CELSR1 cell-cell adhesion
CELSR2 cell-cell adhesion
CELSR2 cell-cell adhesion
CELSR3 cell-cell adhesion
CELSR3 cell-cell adhesion
CFP Soluble factors and receptors
CLSTN1 cell-cell adhesion
CLSTN2 cell-cell adhesion
CLSTN3 cell-cell adhesion
CNTNAP1 Soluble factors and receptors
CNTNAP2 Soluble factors and receptors
CNTNAP3 Soluble factors and receptors
CNTNAP4 Soluble factors and receptors
CNTNAP5 Soluble factors and receptors

COL10A1	ECM
COL11A2	ECM
COL11A2	ECM
COL12A1	ECM
COL13A1	ECM
COL14A1	ECM
COL15A1	ECM
COL16A1	ECM
COL17A1	ECM
COL18A1	ECM
COL19A1	ECM
COL1A1	ECM
COL1A2	ECM
COL20A1	ECM
COL21A1	ECM
COL22A1	ECM
COL23A1	ECM
COL24A1	ECM
COL25A1	ECM
COL27A1	ECM
COL28A1	ECM
COL29A1	ECM
COL2A1	ECM
COL3A1	ECM
COL4A1	ECM
COL4A2	ECM
COL4A3	ECM
COL4A4	ECM
COL4A5	ECM
COL4A6	ECM
COL5A1	ECM
COL5A2	ECM
COL5A3	ECM
COL6A1	ECM
COL6A3	ECM
COL7A1	ECM
COL8A1	ECM
COL8A2	ECM
COL9A1	ECM
COL9A2	ECM
COL9A3	ECM
COMP	ECM
CRELD1	Soluble factors and receptors
CRTAP	ECM
CSF1	Soluble factors and receptors
CSF1R	Soluble factors and receptors
CSF2	Soluble factors and receptors
CSF2RA	Soluble factors and receptors
CSF3	Soluble factors and receptors
CSF3R	Soluble factors and receptors
CSPG2	Soluble factors and receptors
CSPG4	Soluble factors and receptors
CTGF	Soluble factors and receptors
CX3CL1	Soluble factors and receptors
CX3CR1	Soluble factors and receptors
CXCL1	Soluble factors and receptors

CXCL10	Soluble factors and receptors
CXCL11	Soluble factors and receptors
CXCL12	Soluble factors and receptors
CXCL13	Soluble factors and receptors
CXCL14	Soluble factors and receptors
CXCL15	Soluble factors and receptors
CXCL16	Soluble factors and receptors
CXCL17	Soluble factors and receptors
CXCL2	Soluble factors and receptors
CXCL3	Soluble factors and receptors
CXCL4	Soluble factors and receptors
CXCL5	Soluble factors and receptors
CXCL6	Soluble factors and receptors
CXCL7	Soluble factors and receptors
CXCL8	Soluble factors and receptors
CXCL9	Soluble factors and receptors
CXCR1	Soluble factors and receptors
CXCR2	Soluble factors and receptors
CXCR4	Soluble factors and receptors
CXCR5	Soluble factors and receptors
CXCR6	Soluble factors and receptors
CYR61	ECM
DCN	ECM
DKK1	Soluble factors and receptors
DKK2	Soluble factors and receptors
DKK3	Soluble factors and receptors
DMP1	ECM
DMP3	ECM
DSC1	cell-cell adhesion
DSC2	cell-cell adhesion
DSC3	cell-cell adhesion
DSG1	cell-cell adhesion
DSG2	cell-cell adhesion
DSG3	cell-cell adhesion
DSG4	cell-cell adhesion
DTR	Soluble factors and receptors
ECM1	ECM
ECM2	ECM
EFEMP1	ECM
EFEMP2	ECM
EFNA1	Soluble factors and receptors
EFNA2	Soluble factors and receptors
EFNA3	Soluble factors and receptors
EFNA4	Soluble factors and receptors
EFNA5	Soluble factors and receptors
EFNB1	Soluble factors and receptors
EFNB2	Soluble factors and receptors
EFNB3	Soluble factors and receptors
EGF	Soluble factors and receptors
EGFLAM	Soluble factors and receptors
EGFR	Soluble factors and receptors
ELN	ECM
EMID2	ECM
EPGN	ECM
EPHA1	Soluble factors and receptors
EPHA10	Soluble factors and receptors

EPHA2	Soluble factors and receptors
EPHA3	Soluble factors and receptors
EPHA4	Soluble factors and receptors
EPHA5	Soluble factors and receptors
EPHA6	Soluble factors and receptors
EPHA7	Soluble factors and receptors
EPHA8	Soluble factors and receptors
EPHA9	Soluble factors and receptors
EPHB1	Soluble factors and receptors
EPHB2	Soluble factors and receptors
EPHB3	Soluble factors and receptors
EPHB4	Soluble factors and receptors
EPHB5	Soluble factors and receptors
EPHB6	Soluble factors and receptors
EPO	Soluble factors and receptors
EPOR	Soluble factors and receptors
EPR	Soluble factors and receptors
ERBB2	Soluble factors and receptors
ERBB3	Soluble factors and receptors
ERBB4	Soluble factors and receptors
FASLG	Soluble factors and receptors
FASR	Soluble factors and receptors
FAT	Soluble factors and receptors
FAT	cell-cell adhesion
FAT2	Soluble factors and receptors
FAT2	cell-cell adhesion
FAT4	Soluble factors and receptors
FAT4	cell-cell adhesion
FBLN1	ECM
FBLN2	ECM
FBLN3	ECM
FBLN4	ECM
FBLN5	ECM
FBLN7	ECM
FBN1	ECM
FBN2	ECM
FBN3	ECM
FGA	ECM
FGF1	Soluble factors and receptors
FGF10	Soluble factors and receptors
FGF11	Soluble factors and receptors
FGF12	Soluble factors and receptors
FGF13	Soluble factors and receptors
FGF14	Soluble factors and receptors
FGF17	Soluble factors and receptors
FGF18	Soluble factors and receptors
FGF19	Soluble factors and receptors
FGF2	Soluble factors and receptors
FGF20	Soluble factors and receptors
FGF21	Soluble factors and receptors
FGF22	Soluble factors and receptors
FGF23	Soluble factors and receptors
FGF3	Soluble factors and receptors
FGF4	Soluble factors and receptors
FGF5	Soluble factors and receptors
FGF6	Soluble factors and receptors

FGF7	Soluble factors and receptors
FGF8	Soluble factors and receptors
FGF9	Soluble factors and receptors
FGFR1	Soluble factors and receptors
FGFR2	Soluble factors and receptors
FGFR3	Soluble factors and receptors
FGFR4	Soluble factors and receptors
FGFR6	Soluble factors and receptors
FLRT1	ECM
FLRT2	ECM
FLRT3	ECM
FMOD	ECM
FN1	ECM
FSTL1	soluble factors and receptors
FSTL3	soluble factors and receptors
FZD1	Soluble factors and receptors
FZD10	Soluble factors and receptors
FZD2	Soluble factors and receptors
FZD3	Soluble factors and receptors
FZD4	Soluble factors and receptors
FZD5	Soluble factors and receptors
FZD6	Soluble factors and receptors
FZD7	Soluble factors and receptors
FZD8	Soluble factors and receptors
FZD9	Soluble factors and receptors
GAS1	soluble factors and receptors
GAS6	soluble factors and receptors
GDF9	soluble factors and receptors
GH	soluble factors and receptors
GHR	soluble factors and receptors
HBEGF	soluble factors and receptors
HGF	soluble factors and receptors
HGFR	soluble factors and receptors
HMCN1	ECM
HSPG2	ECM
ICAM1	cell-cell adhesion
ICAM2	cell-cell adhesion
ICAM3	cell-cell adhesion
ICAM4	cell-cell adhesion
ICAM5	cell-cell adhesion
IFNA	Soluble factors and receptors
IFNAR	Soluble factors and receptors
IFNB	Soluble factors and receptors
IFNE	Soluble factors and receptors
IFNG	Soluble factors and receptors
IGF1	Soluble factors and receptors
IGF1R	Soluble factors and receptors
IGF2	Soluble factors and receptors
IGF2R	Soluble factors and receptors
IGFBP1	Soluble factors and receptors
IGFBP2	Soluble factors and receptors
IGFBP3	Soluble factors and receptors
IGFBP4	Soluble factors and receptors
IGFBP5	Soluble factors and receptors
IGFBP6	Soluble factors and receptors
IGFBP7	Soluble factors and receptors

IL1	Soluble factors and receptors
IL10	Soluble factors and receptors
IL10R	Soluble factors and receptors
IL11	Soluble factors and receptors
IL11R	Soluble factors and receptors
IL12	Soluble factors and receptors
IL12R	Soluble factors and receptors
IL13	Soluble factors and receptors
IL13R	Soluble factors and receptors
IL14	Soluble factors and receptors
IL14R	Soluble factors and receptors
IL15	Soluble factors and receptors
IL15R	Soluble factors and receptors
IL16	Soluble factors and receptors
IL16R	Soluble factors and receptors
IL17	Soluble factors and receptors
IL17R	Soluble factors and receptors
IL18	Soluble factors and receptors
IL18R	Soluble factors and receptors
IL19	Soluble factors and receptors
IL19R	Soluble factors and receptors
IL1R	Soluble factors and receptors
IL2	Soluble factors and receptors
IL20	Soluble factors and receptors
IL20R	Soluble factors and receptors
IL21	Soluble factors and receptors
IL21R	Soluble factors and receptors
IL22	Soluble factors and receptors
IL22R	Soluble factors and receptors
IL23	Soluble factors and receptors
IL23R	Soluble factors and receptors
IL24	Soluble factors and receptors
IL25	Soluble factors and receptors
IL26	Soluble factors and receptors
IL27	Soluble factors and receptors
IL27R	Soluble factors and receptors
IL28	Soluble factors and receptors
IL28R	Soluble factors and receptors
IL29	Soluble factors and receptors
IL2R	Soluble factors and receptors
IL3	Soluble factors and receptors
IL30	Soluble factors and receptors
IL31	Soluble factors and receptors
IL32	Soluble factors and receptors
IL33	Soluble factors and receptors
IL35	Soluble factors and receptors
IL3R	Soluble factors and receptors
IL4	Soluble factors and receptors
IL4R	Soluble factors and receptors
IL5	Soluble factors and receptors
IL5R	Soluble factors and receptors
IL6	Soluble factors and receptors
IL6R	Soluble factors and receptors
IL6ST	Soluble factors and receptors
IL7	Soluble factors and receptors
IL7R	Soluble factors and receptors

IL8	Soluble factors and receptors
IL8R	Soluble factors and receptors
IL9	Soluble factors and receptors
INFGR	Soluble factors and receptors
INHBA	Soluble factors and receptors
ITGA1	ECM
ITGA10	ECM
ITGA11	ECM
ITGA2	ECM
ITGA3	ECM
ITGA4	ECM
ITGA5	ECM
ITGA6	ECM
ITGA7	ECM
ITGA8	ECM
ITGA9	ECM
ITGAD	ECM
ITGAE	ECM
ITGAL	ECM
ITGAM	ECM
ITGAV	ECM
ITGAW	ECM
ITGAX	ECM
ITGB1	ECM
ITGB2	ECM
ITGB3	ECM
ITGB4	ECM
ITGB5	ECM
ITGB6	ECM
ITGB7	ECM
ITGB8	ECM
ITGBL1	ECM
KERA	ECM
L1CAM	cell-cell adhesion
LAMA1	ECM
LAMA2	ECM
LAMA3	ECM
LAMA4	ECM
LAMA5	ECM
LAMB1	ECM
LAMB2	ECM
LAMB3	ECM
LAMB4	ECM
LAMB5	ECM
LAMC1	ECM
LAMC2	ECM
LAMC3	ECM
LIBC	Soluble factors and receptors
LIF	Soluble factors and receptors
LIFR	Soluble factors and receptors
LOX	ECM remodeling-related
LOXL1	ECM remodeling-related
LOXL2	ECM remodeling-related
LOXL3	ECM remodeling-related
LOXL4	ECM remodeling-related
LP	Soluble factors and receptors

LTBP1	Soluble factors and receptors
LTBP2	Soluble factors and receptors
LTBP3	Soluble factors and receptors
LTBP4	Soluble factors and receptors
LUM	ECM
MATN1	ECM
MATN2	ECM
MATN3	ECM
MEGF10	Soluble factors and receptors
MEGF12	Soluble factors and receptors
MEGF6	Soluble factors and receptors
MEGF8	Soluble factors and receptors
MEGF9	Soluble factors and receptors
MFAP1	ECM
MFAP2	ECM
MFAP3	ECM
MFAP5	ECM
MGP	ECM
MMP1	ECM remodeling-related
MMP10	ECM remodeling-related
MMP11	ECM remodeling-related
MMP12	ECM remodeling-related
MMP13	ECM remodeling-related
MMP14	ECM remodeling-related
MMP15	ECM remodeling-related
MMP16	ECM remodeling-related
MMP17	ECM remodeling-related
MMP18	ECM remodeling-related
MMP19	ECM remodeling-related
MMP2	ECM remodeling-related
MMP20	ECM remodeling-related
MMP21	ECM remodeling-related
MMP23a	ECM remodeling-related
MMP23B	ECM remodeling-related
MMP24	ECM remodeling-related
MMP25	ECM remodeling-related
MMP26	ECM remodeling-related
MMP27	ECM remodeling-related
MMP28	ECM remodeling-related
MMP3	ECM remodeling-related
MMP7	ECM remodeling-related
MMP8	ECM remodeling-related
MMP9	ECM remodeling-related
MPL	Soluble factors and receptors
MSTN	Soluble factors and receptors
MUC1	ECM
MUC12	ECM
MUC13	ECM
MUC15	ECM
MUC16	ECM
MUC17	ECM
MUC19	ECM
MUC2	ECM
MUC20	ECM
MUC3	ECM
MUC4	ECM

MUC5	ECM
MUC6	ECM
MUC7	ECM
MUC8	ECM
NCAM1	cell-cell adhesion
NCAN	Cell-cell adhesion
NELL2	ECM
NGF	Soluble factors and receptors
NID1	ECM
NOV	Soluble factors and receptors
NRG1	Soluble factors and receptors
NRG2	Soluble factors and receptors
NRG3	Soluble factors and receptors
NRG4	Soluble factors and receptors
NRXN1	Cell-cell adhesion
NRXN2	Cell-cell adhesion
NRXN3	Cell-cell adhesion
NTN1	ECM
NTN2L	ECM
NTN4	ECM
NTNG1	ECM
NTNG2	ECM
OSM	Soluble factors and receptors
OSMR	Soluble factors and receptors
PAPLN	ECM
PCDH1	cell-cell adhesion
PCDH11X	cell-cell adhesion
PCDHA	cell-cell adhesion
PCDHB	cell-cell adhesion
PCDHG	cell-cell adhesion
PCLKC	cell-cell adhesion
PCOLCE	ECM remodeling-related
PDGFA	Soluble factors and receptors
PDGFB	Soluble factors and receptors
PDGFC	Soluble factors and receptors
PDGFD	Soluble factors and receptors
PDGFRA	Soluble factors and receptors
PDGFRB	Soluble factors and receptors
PECAM1	cell-cell adhesion
PGF	Soluble factors and receptors
PLAT	ECM remodeling-related
PLAU	ECM remodeling-related
PLAUR	ECM remodeling-related
PLG	ECM remodeling-related
PLOD1	ECM remodeling-related
PRELP	ECM
PRL	Soluble factors and receptors
PRLR	Soluble factors and receptors
PROS1	Soluble factors and receptors
RESDA1	Cell-cell adhesion
RESDA1	cell-cell adhesion
RET	cell-cell adhesion
RSPO1	Soluble factors and receptors
RSPO2	Soluble factors and receptors
RSPO3	Soluble factors and receptors
SELE	cell-cell adhesion

SELL	Cell-cell adhesion
SELP	cell-cell adhesion
SEMA5A	Soluble factors and receptors
SEMA5B	Soluble factors and receptors
SEPP1	Soluble factors and receptors
SERPINA1	ECM remodeling-related
SERPINA10	ECM remodeling-related
SERPINA11	ECM remodeling-related
SERPINA12	ECM remodeling-related
SERPINA13	ECM remodeling-related
SERPINA2	ECM remodeling-related
SERPINA3	ECM remodeling-related
SERPINA4	ECM remodeling-related
SERPINA5	ECM remodeling-related
SERPINA6	ECM remodeling-related
SERPINA7	ECM remodeling-related
SERPINA8	ECM remodeling-related
SERPINA9	ECM remodeling-related
SERPINC1	ECM remodeling-related
SERPIND1	ECM remodeling-related
SERPINE1	ECM remodeling-related
SERPINE2	ECM remodeling-related
SERPINF1	ECM remodeling-related
SERPINF2	ECM remodeling-related
SERPING1	ECM remodeling-related
SERPINH1	ECM remodeling-related
SERPINI1	ECM remodeling-related
SERPINI2	ECM remodeling-related
SKALP	ECM remodeling-related
SLIT1	soluble factors and receptors
SLIT2	soluble factors and receptors
SLIT3	soluble factors and receptors
SMC3	ECM
SPARC	ECM remodeling-related
SPON1	ECM
SPON2	ECM
SPP1	ECM
SSPO	ECM remodeling-related
STAB1	Soluble factors and receptors
SULF1	Soluble factors and receptors
SULF2	Soluble factors and receptors
TFPI	Soluble factors and receptors
TFPI2	Soluble factors and receptors
TGFA	Soluble factors and receptors
TGFB1	Soluble factors and receptors
TGFB2	Soluble factors and receptors
TGFB3	Soluble factors and receptors
TGFBI	Soluble factors and receptors
TGFBR1	Soluble factors and receptors
TGFBR2	Soluble factors and receptors
TGFBR3	Soluble factors and receptors
TGFBR5	Soluble factors and receptors
TGFBRII	Soluble factors and receptors
THBS1	ECM
THBS2	ECM
THBS3	ECM

THBS4	ECM
THBS5	ECM
THSD1	ECM remodeling-related
THSD3	ECM remodeling-related
THSD7	ECM remodeling-related
TIMP1	ECM remodeling-related
TIMP2	ECM remodeling-related
TIMP3	ECM remodeling-related
TIMP4	ECM remodeling-related
TLR1	Soluble factors and receptors
TLR10	Soluble factors and receptors
TLR2	Soluble factors and receptors
TLR3	Soluble factors and receptors
TLR4	Soluble factors and receptors
TLR5	Soluble factors and receptors
TLR6	Soluble factors and receptors
TLR7	Soluble factors and receptors
TLR8	Soluble factors and receptors
TLR9	Soluble factors and receptors
TNC	Soluble factors and receptors
TNF	Soluble factors and receptors
TNFB	Soluble factors and receptors
TNFC	Soluble factors and receptors
TNFSF1	Soluble factors and receptors
TNFSF10	Soluble factors and receptors
TNFSF11	Soluble factors and receptors
TNFSF12	Soluble factors and receptors
TNFSF13	Soluble factors and receptors
TNFSF14	Soluble factors and receptors
TNFSF2	Soluble factors and receptors
TNFSF4	Soluble factors and receptors
TNFSF5	Soluble factors and receptors
TNFSF8	Soluble factors and receptors
TNFSF9	Soluble factors and receptors
TNR	ECM
TNX	ECM
TNY	ECM
TPO	Soluble factors and receptors
USH2A	ECM
VCAM1	cell-cell adhesion
VCAN	ECM
VEGFA	Soluble factors and receptors
VEGFB	Soluble factors and receptors
VEGFC	Soluble factors and receptors
VEGFD	Soluble factors and receptors
VEGFR1	Soluble factors and receptors
VEGFR2	Soluble factors and receptors
VEGFR3	Soluble factors and receptors
VTN	ECM
VWF	ECM
WISP1	Soluble factors and receptors
WISP2	Soluble factors and receptors
WISP3	Soluble factors and receptors
WNT1	soluble factors and receptors
WNT10	soluble factors and receptors
WNT11	soluble factors and receptors

WNT16	soluble factors and receptors
WNT2	soluble factors and receptors
WNT3	soluble factors and receptors
WNT4	soluble factors and receptors
WNT5	soluble factors and receptors
WNT6	soluble factors and receptors
WNT7	soluble factors and receptors
WNT8	soluble factors and receptors
WNT9	soluble factors and receptors
XCR1	soluble factors and receptors
XCR2	soluble factors and receptors
XLC1	soluble factors and receptors
XLC2	soluble factors and receptors

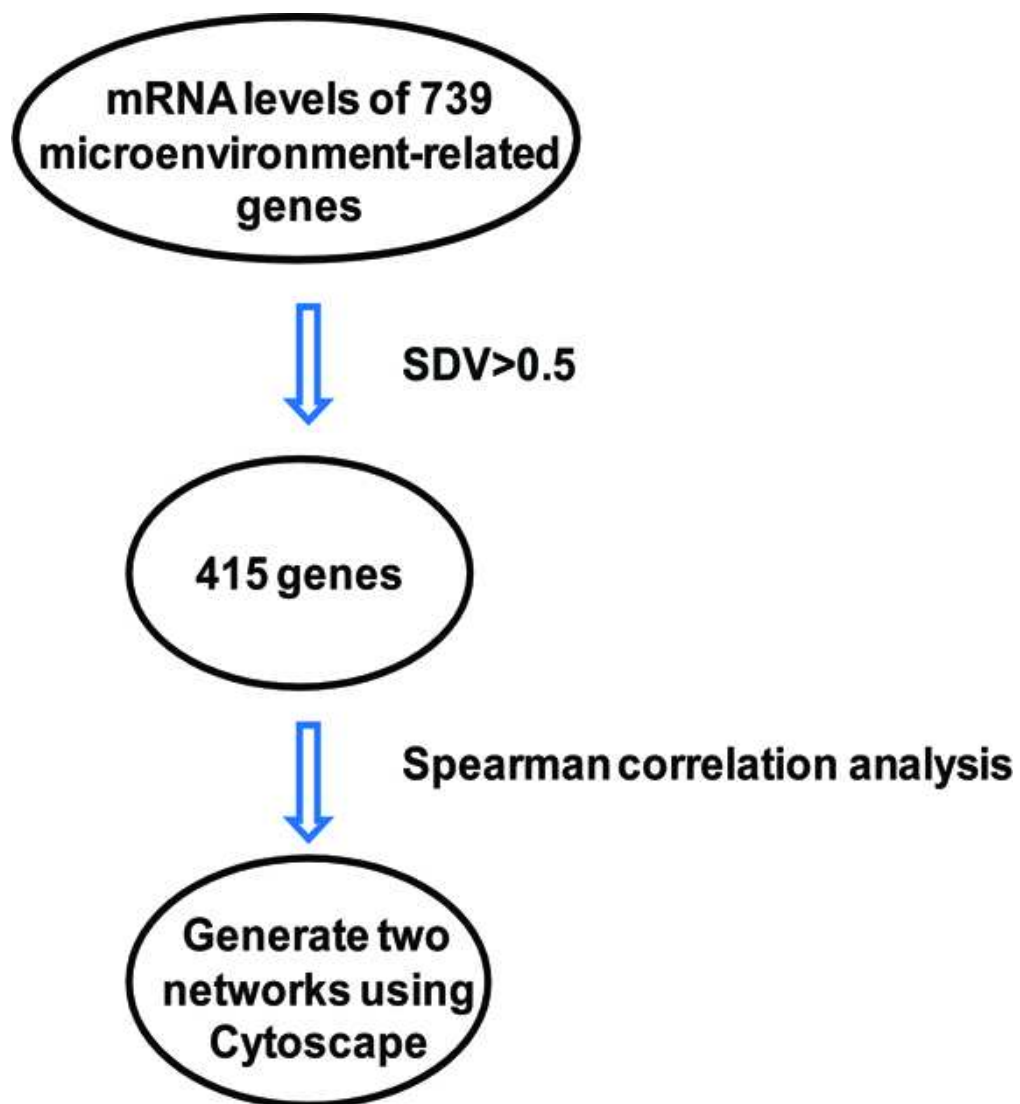


Fig S1. A scheme showing how the coexpression network analysis was performed. Messenger RNA levels of 739 microenvironmental-related genes were obtained from published breast cancer microarray data. Four hundred fifteen genes were selected for the further analysis based on standard deviation value of the mRNA levels. The genes whose mRNA levels are significantly correlated were used to construct microenvironment gene networks with Cytoscape.

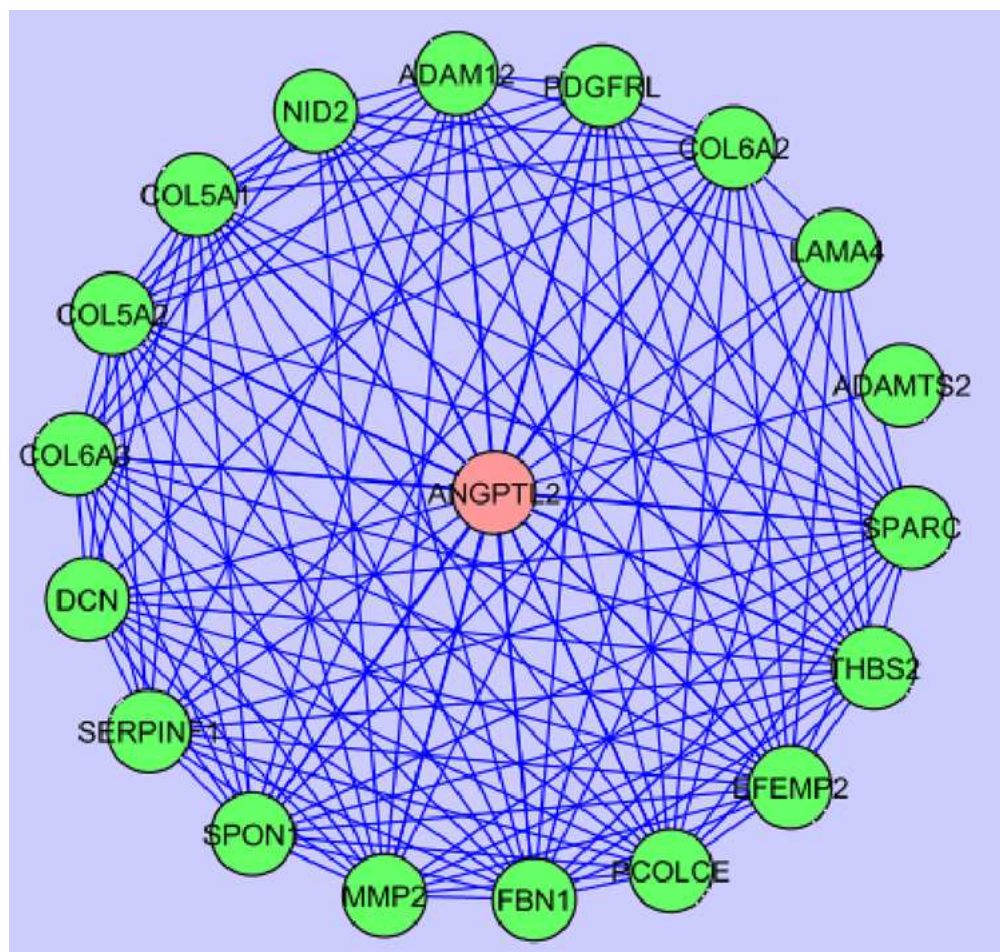


Fig S2. A network composed of ANGPTL2 and ECM-related genes may represent a functional connection between ANGPTL2 and ECM remodeling.