

**S3 Table. List of upregulated and downregulated genes in P28B cells according to gene ontology analysis**

Gene ontology	Set of genes
<i>Upregulated genes (fold-change ≥ 2)</i>	
GO:0007166~cell surface receptor linked signal transduction	<b>NOG</b> , GRIK1, <b>PREX2</b> , <b>EDN1</b> , <b>MITF</b> , <b>LPAR3</b> , VIPR2, <b>WNT2</b> , <u>FOXF1</u> , <b>CXCR7</b> , LBP, <b>SHC3</b> , CFD, CIB2, <b>LYN</b> , <b>PTGER4</b> , <b>PTHLH</b> , <b>ADAMTS7</b> , <b>CHRM3</b> , <b>ADM</b> , <b>GPR56</b> , <b>SORT1</b> , OR10K2, <b>GPR183</b> , TWSG1, <b>FGFR4</b> , USP9Y, GPR63, <b>GPR65</b> , OXTR, CACNB3, <b>ITGB3</b> , <b>KIT</b> , GPRC5B, ADAP1, MUSK, <b>TEK</b> , <b>P2RY1</b> , <b>CD24</b> , D4S234E, <u>PPAP2A</u> , <b>ENTPD1</b> , DTX4, <u>TXNIP</u> , GABRA2, <b>SMAD9</b> , <b>NLK</b> , <b>GRIA4</b> , <b>FZD7</b> , <b>FZD6</b> , <b>WNT2B</b> , <b>RPS6KA5</b> , <b>SEMA6A</b> , <b>LAMA3</b> , <b>EPHA6</b> , <u>PENK</u> , NPY*, <u>ITGA8*</u> , P2RY14, <u>RGS6</u> , <b>GFRA1</b> , SMURF2*, RGS9, <b>BAMBI</b> , <u>SST</u>
GO:0007155~cell adhesion	<u>PPFIA2</u> , <b>VTN</b> , <b>ITGB3</b> , <b>CDH6</b> , <b>CD9</b> , <u>FAT3</u> , <u>FAT4</u> , <b>TEK</b> , ACAN, <b>SSX2IP</b> , <b>CD24</b> , <b>ENTPD1</b> , APBA1, <b>F11R*</b> , <b>SVEP1</b> , <b>EGFL6</b> , SDK1, NFASC, CLDN22, <b>MCAM</b> , <b>NCAM2</b> , <b>LAMA3</b> , <b>NLGN4Y</b> , <u>DSG2*</u> , <u>ITGA8*</u> , <b>GPR56</b> , <u>DSC3</u> , <u>DSC2</u> , <u>RELN</u> , <b>SEMA4D</b> , <b>JAM2</b> , <b>CHL1*</b>
GO:0007186~G-protein coupled receptor protein signaling pathway	<b>GPR183</b> , GPR63, <b>EDN1</b> , <b>PREX2</b> , <b>GPR65</b> , <b>LPAR3</b> , OXTR, GPRC5B, VIPR2, <b>CXCR7</b> , <b>P2RY1</b> , <u>PPAP2A</u> , <b>ENTPD1</b> , D4S234E, GABRA2, <b>PTGER4</b> , <b>FZD7</b> , <b>FZD6</b> , <b>PTHLH</b> , NPY*, <u>PENK</u> , <b>ADM</b> , <b>CHRM3</b> , P2RY14, <b>GPR56</b> , <u>RGS6</u> , <b>SORT1</b> , RGS9, <u>SST</u> , OR10K2
GO:0006811~ion transport	SLC38A4, SCN3A, GRIK1, <b>TRPV2</b> , <b>ANO1</b> , CCL8, SLC38A11, CACNB3, KCNK12, <b>WNT2</b> , KCNQ3, <b>SLC4A4</b> , <b>SCN5A</b> , CNNM2, GABRA2, KCND3, SLC8A1, <b>TRPC3</b> , <b>TRPC6</b> , <b>TRPA1</b> , <b>GRIA4</b> , CNNM1, P2RX5, NPY*, <b>UCP2</b> , <b>ABCC4</b> , RYR2, KCNH7, <b>CP</b>
GO:0007267~cell-cell signaling	<b>FGFR4</b> , GRIK1, <b>EDN1</b> , <b>LPAR3</b> , CCL8, OXTR, VIPR2, <b>WNT2</b> , NPTX1, MUSK, KCNQ3, <b>TEK</b> , <b>CD24</b> , <b>SHC3</b> , APBA1, GABRA2, <b>LYN</b> , <b>GRIA4</b> , <b>PTHLH</b> , CCL13, <u>TNFSF10</u> , <b>CXCL14</b> , NPY*, <b>ADM</b> , <b>GPR56</b> , <b>TFAP2C</b> , <b>PMP22</b> , <u>SST</u>
GO:0042127~regulation of cell proliferation	<b>FGFR4</b> , <b>NOG</b> , <b>CSF1</b> , <b>EDN1</b> , <b>MITF</b> , <b>KIT</b> , FLT3LG, <b>WNT2</b> , CD9*, <b>TEK</b> , <b>CD24</b> , <u>PPAP2A</u> , NKX2-3, <u>TXNIP</u> , <b>NOX4</b> , <b>LYN</b> , <b>IL6R</b> , <b>PTHLH</b> , <b>ADAMTS8*</b> , <b>ADM</b> , <b>F3</b> , <b>WFDC1</b> , <b>PMP22</b> , <u>SST</u> , MAB21L2, ICOSLG
GO:0009611~response to wounding	<b>NOX4</b> , <b>F11R*</b> , C7, A2M, <b>NOG</b> , F10, <b>CYP1A1</b> , <b>LYN</b> , SCUBE1, CCL8, <b>IL6R</b> , <b>ITGB3</b> , IGSF10, CD9*, CCL13, <b>ADM</b> , <b>F3</b> , <b>P2RY1</b> , <b>CD24</b> , LBP, CFD, <b>ENTPD1</b>
GO:0006955~immune response	<b>GPR183</b> , C7, <b>PTGER4</b> , <b>LYN</b> , <b>GPR65</b> , CCL8, <b>VTN</b> , <b>IL6R</b> , CCL13, <u>TNFSF10</u> , SARM1, <b>CXCL14</b> , P2RY14, <b>SEMA4D</b> , LBP, <b>CD24</b> , CFD, ICOSLG, <u>GBP2</u> , NKX2-3
GO:0006928~cell motion	PALM, MDGA1, NFASC, <b>IL6R</b> , <b>KIT</b> , DNAH5, <b>ELMO1</b> , <b>WNT2</b> , CD9*, <b>SEMA6A</b> , NPY*, <u>RELN</u> , <b>CD24</b> , <u>UNC5C*</u> , <u>PPAP2A</u> , NKX2-3
<i>Downregulated genes (fold-change ≤ 0.5)</i>	
GO:0042127~regulation of cell proliferation	<b>NRP1</b> , <u>CLU*</u> , <u>PRRX1*</u> , <b>JAG1</b> , PNP, <b>GLI3</b> , <b>MSX2</b> , <u>RAC2*</u> , <b>SERPINE1</b> , <b>CHST11</b> , <b>ADRA2A</b> , <b>IL1B</b> , <u>RARB</u> , <b>IL1A</b> , <u>CDC6*</u> , <b>ARHGEF2</b> , <b>IL6</b> , <u>ITGA2*</u> , <u>GAS1</u> , CDKN3*, <b>VASH2</b> , <u>CDH13</u> , <u>PLA2G4A</u> , <u>CTH*</u> , <u>CCND2</u> , <u>TGFBR3</u> , <u>KLF4</u> , <b>NFIB</b> , HTR2A
GO:0006928~cell motion	<b>IL6</b> , <b>NRP1</b> , <b>ENPP2</b> , <b>MET</b> , <u>ITGA2*</u> , <b>SPOCK1</b> , <u>GAS1</u> , ENPEP*, <u>SLIT2</u> , <u>PLAUR</u> , <u>EPHB2</u> , <u>CDH13</u> , <u>UNC5B</u> , ANK3, FYN*, <b>ADRA2A</b> , <b>IL1B</b> , <u>TGFBR3</u> , <b>SEMA3C</b> , <b>VCAN</b>
GO:0042981~regulation of apoptosis	<b>KCNMA1</b> , <b>ARHGEF2</b> , <b>IL6</b> , <u>CLU*</u> , <u>GAS1</u> , <u>GLI3</u> , CD74*, <b>MSX2</b> , <u>CDH13</u> , <u>PLA2G4A</u> , UACA*, <b>CHST11</b> , <u>SERPINE2</u> , <b>IL1B</b> , <u>RARB</u> , TOP2A*, <u>NEFL</u> , <b>IL1A</b>
GO:0006955~immune response	<b>IL18R1</b> , <u>KYNU</u> , <b>IL6</b> , <b>ENPP2</b> , PRG4, CFB, <u>CLU*</u> , IFI44L, <b>CTSS</b> , PNP, CD74*, <b>IL1B</b> , <u>TGFBR3</u> , <b>SEMA3C</b> , HLA-DPA1, <b>PTX3</b> , <b>IL1A</b>
GO:0007155~cell adhesion	<b>NRP1</b> , PCDHB8, PCDHB5, <u>PCDH10</u> , <u>ITGA2*</u> , <b>SPOCK1</b> , <u>ITGA3*</u> , <u>POSTN*</u> , <u>CLDN11</u> , ECM2, <u>EMILIN2</u> , <b>TPBG</b> , <u>CDH13</u> , TNFAIP6, PGM5, <u>SRPX</u> , <b>VCAN</b>
GO:0000278~mitotic cell cycle	<u>CDC6*</u> , <b>ARHGEF2</b> , <u>CCND2</u> , <b>PLK1</b> , NCAPG, <b>DLGAP5</b> , <b>BUB1B*</b> , <b>CENPF</b> , <b>HORMAD1</b> , CDKN3*, <u>ASPM*</u>
GO:0001944~vasculature development	<u>CDH13</u> , <b>BGN</b> , <b>NRP1</b> , <u>PRRX1*</u> , <u>TGFBR3</u> , <b>IL1B</b> , <b>SEMA3C</b> , ENPEP*, <b>JAG1</b> , <u>SLIT2</u>

Pro-tumorigenic genes (bold), anti-tumorigenic genes (underlined) and genes with both effects in tumorigenesis (asterisk, \*) are indicated based on literature review (see S4 Table).