Supplementary Table 2. Functional enrichment analysis for differentially expressed immunity-related genes in breast cancer.

| Category | Term ID | Term name                                | Count | FDR       | Gene symbol                                                                 |
|----------|---------|------------------------------------------|-------|-----------|------------------------------------------------------------------------------|
| KEGG     | hsa04060| Cytokine-cytokine receptor interaction   | 42    | 3.18E-28  | IL9R, CXCL5, CXCL3, LEPR, IL21R, CXCL2, TNFRSF8, CNTFR, CXCL6, CXCL11,       |
|          |         |                                          |       |           | CCL28, CCL7, IL11, CXCL10, CCL24, IL17B, CCL23, CCL20, CCL21, TNFRSF18, LTA, |
|          |         |                                          |       |           | GHR, EPO, THPO, IL6, BMP2, TNFSF4, LIFR, IL20, CCL11, LEP, TSLP, TNFRSF9,   |
|          |         |                                          |       |           | INHBA, CCR8, AMH, CCL13, CCL14, TNFRSF10D, CCR4, NGFR, BMPR1B, CXCL5,       |
|          |         |                                          |       |           | GNAI1, CXCL3, CXCL2, CXCL6, CXCL11, CCL28, CCL7, CXCL10, CCL24, CCL11,    |
|          |         |                                          |       |           | CCR8, CCL13, CCL23, CCL14, CCL20, CCR4, CCL21, SHC3, PIK3R2, CXCL11, LEP, |
|          |         |                                          |       |           | TSLP, TNFRSF9, INHBA, CCR8, AMH, CCL13, CCL14, TNFRSF10D, CCR4, NGFR,     |
|          |         |                                          |       |           | BMPR1B, CXCL5, GNAI1, CXCL3, CXCL2, CXCL6, CXCL11, CCL28, CCL7, CXCL10,   |
|          |         |                                          |       |           | CCL24, CCL11, CCR8, CCL13, CCL23, CCL14, CCL20, CCR4, CCL21, SHC3, PIK3R2, |
|          |         |                                          |       |           | CXCL11, LEP, TSLP, TNFRSF9, INHBA, CCR8, AMH, CCL13, CCL14, TNFRSF10D,    |
|          |         |                                          |       |           | CCR4, NGFR, BMPR1B, CXCL5, GNAI1, CXCL3, CXCL2, CXCL6, CXCL11, CCL28,     |
|          |         |                                          |       |           | CCL7, CXCL10, CCL24, SLC11A1, IL17D, IL17B, CCL23, CCL20, CCL21, TNFRSF18,|
|          |         |                                          |       |           | PTX3, SCG2, IL6, BMP2, OLR1, IL27, PTGFR, S100A12, CCL11, TNFRSF9, ORM1,   |
|          |         |                                          |       |           | CCL13, CCL14, TNFRSF10D, CCR4, NGFR, BMPR1B, BMP6, LALBA, CGA, EDN3,      |
|          |         |                                          |       |           | FGF3, CGA, EDN3, FGF3, CXCL5, FGF16, TAC1, CXCL6, TRH, CXCL11, CCL7,      |
|          |         |                                          |       |           | IL11, CXCL10, CCL24, PCSK1, IL17B, CCL23, CCL20, CCL21, LTA, BMP2, NTF4,  |
|          |         |                                          |       |           | NTF3, INHA, INHBA, AMH, ADRB2, CCL13, ADRB1, SSTR1, CTSG, GHR, OPRD1      |
|          |         |                                          |       |           |                                                                             |
| KEGG     | hsa04062| Chemokine signaling pathway               | 20    | 1.96E-07  | IL6, IL9R, LEPR, IL21R, LIFR, CNTFR, IL20, IL11, LEP, TSLP, GHR, IL22RA2, |
|          |         |                                          |       |           | PIK3R2, THPO, EPO, AVPR2, CGA, PTH2R, LEPR, TACR1, ADCYAP1R1, PTH1R, OXTR, |
|          |         |                                          |       |           | PTGFR, LEP, EDNRB, ADRB2, ADRB1, SSTR1, CTSG, GHR, OPRD1                   |
| KEGG     | hsa04630| Jak-STAT signaling pathway                | 15    | 0.000126  | IL6, IL9R, LEPR, IL21R, LIFR, CNTFR, IL20, IL11, LEP, TSLP, GHR, IL22RA2, |
|          |         |                                          |       |           | PIK3R2, THPO, EPO, AVPR2, CGA, PTH2R, LEPR, TACR1, ADCYAP1R1, PTH1R, OXTR, |
|          |         |                                          |       |           | PTGFR, LEP, EDNRB, ADRB2, ADRB1, SSTR1, CTSG, GHR, OPRD1                   |
| KEGG     | hsa04080| Neuroactive ligand-receptor interaction   | 17    | 0.015305  | IL6, IL9R, LEPR, IL21R, LIFR, CNTFR, IL20, IL11, LEP, TSLP, GHR, IL22RA2, |
|          |         |                                          |       |           | PIK3R2, THPO, EPO, AVPR2, CGA, PTH2R, LEPR, TACR1, ADCYAP1R1, PTH1R, OXTR, |
|          |         |                                          |       |           | PTGFR, LEP, EDNRB, ADRB2, ADRB1, SSTR1, CTSG, GHR, OPRD1                   |
| KEGG     | hsa04923| Regulation of lipolysis in adipocytes     | 8     | 0.0431    | CGA, ADRB2, ADRB1, PTGS2, GNAI1, NPR1, FABP4, PIK3R2                      |
|          |         |                                          |       |           |                                                                             |
| GO BP    | GO:0006954| inflammatory response                    | 37    | 2.37E-21  | CXCL5, PTGS2, TACR1, CXCL3, CXCL2, TAC1, TNFRSF8, CXCL6, CXCL11, CCL7,    |
|          |         |                                          |       |           | CCL24, SLC11A1, IL17D, IL17B, CCL23, CCL20, CCL21, TNFRSF18, PTX3, SCG2,  |
|          |         |                                          |       |           | IL6, BMP2, OLR1, IL27, PTGFR, S100A12, CCL11, TNFRSF9, ORM1, CCL13, CCL14,|
|          |         |                                          |       |           | TNFRSF10D, CCR4, NGFR, BMPR1B, BMP6, LALBA, CGA, EDN3, FGF3, CXCL5, FGF16,|
|          |         |                                          |       |           | TAC1, CXCL6, TRH, CXCL11, CCL7, IL11, CXCL10, CCL24, PCSK1, IL17B, CCL23,|
|          |         |                                          |       |           | CCL20, CCL21, LTA, BMP2, NTF4, NTF3, INHA, INHBA, AMH, ADRB2, CCL13, ADRB1,|
|          |         |                                          |       |           | SSTR1, CTSG, GHR, OPRD1                                                  |
| GO BP    | GO:0007267| cell-cell signaling                     | 31    | 4.44E-20  |                                                                             |

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| GO BP       | GO:0009655 | immune response | 36 | 9.48E-19 |
|-------------|------------|-----------------|----|----------|
| GO BP       | GO:0070098 | chemokine-mediated signaling pathway | 17 | 2.78E-14 |
| GO BP       | GO:0032496 | response to lipopolysaccharide | 20 | 1.11E-11 |
| GO BP       | GO:0008284 | positive regulation of cell proliferation | 30 | 1.11E-11 |
| GO BP       | GO:0006935 | chemotaxis | 16 | 3.65E-09 |
| GO BP       | GO:0070374 | positive regulation of ERK1 and ERK2 cascade | 18 | 5.75E-09 |
| GO BP       | GO:0007166 | cell surface receptor signaling pathway | 21 | 1.36E-08 |
| GO BP       | GO:0007165 | signal transduction | 40 | 6.6E-08 |

**PYY**

CXCL5, CXCL3, CXCL2, TNFRSF8, CXCL6, CXCL11, CCL28, CXCL10, CCL24, SLCL1A1, IL17B, CCL23, CCL20, CCL21, ICOS, TNFRSF18, DEFB1, LTA, IL6, TNFSF4, CD1A, IL20, CCL11, CCR8, TNFRSF9, CCL13, CCL14, TNFRSF10D, CCR4, IGHE, TGFBR3, CMA1, NGFR, CTSG, BMP6, OPRD1 CCL5, CXCL5, CXCL3, CXCL2, CXCL6, CXCL11, CCL7, CXCL10, CCL24, CCL11, CCR8, CCL13, CCL23, CCL14, CCL20, CCL21, CCR4, GPR17 CXCL5, PTGS2, CXCL3, CXCL2, TAC1, TNFRSF8, FGF10, CXCL6, CXCL11, PTGFR, CXCL10, SLC11A1, TNFRSF9, PENK, TNFRSF10D, TNFRSF18, NGFR, CTSG, LTA, EPO

CGA, EDN3, AVPR2, FG7, FGFR3, CXCL5, EDN2, PTH1R, CNTFR, ESM1, IL11, CXCL10, EDNRB, NRG1, FGFI, FGF2, EPO, EGF, IL6, TNFSF4, NT3, CAMP, LIFR, IGFI, BIRC5, PTGFR, LEP, CCL14, S100B, PROK1 CXCL5, CXCL2, CXCL6, CXCL11, CCL28, CCL7, CXCL10, CCL24, CCL11, CCR8, CCL13, CCL23, CCL20, CCR4, DEFB1, FGF2

EGFR, IL6, BMP2, FGFR3, FGF10, CCL7, CCL24, CCL11, CCL13, CCL23, CCL14, CCL20, CCL21, ANGPT1, FGFI, FGF2, EPO, THPO

EGFR, EDN3, PTH2R, LEP, EDNR2, TACR1, ADCCAP1R2, PTH1R, LIFR, OXTR, NPR1, INHA, CXCL10, MARCO, INHBA, IL17D, EDNRB, ADRA2, CD19, IL17B, SSTR1 LALBA, CGA, EDN3, IL9R, FGF7, CXCL5, PPARG, FGF16, NR3C2, TNFRSF8, CNTFR, CXCL6, TRH, CXCL11, CCL7, PDCD1, CCL10, CCL24, CCL23, CCL20, TNFRSF18, SHC3, FGF1, FGF2, NRG2, LTA, EPO, PIK3R2, EGF, TNFSF4, NT3, ARTN, IGF1, INHA, CXCL11, LEP, CCL13, NTS, PENK, TNFRSF10D
| GO BP | GO:0048015 | phosphatidylinositol-mediated signaling | 14 | 1.17E-07 |
|-------|-------------|---------------------------------------|-----|-----------|
| GO BP | GO:0030593 | neutrophil chemotaxis | 12 | 1.18E-07 |
| GO BP | GO:0002548 | monocyte chemotaxis regulation of phosphatidylinositol 3-kinase signaling | 10 | 6.22E-07 |
| GO BP | GO:0014066 | positive regulation of phosphatidylinositol phosphorylation | 12 | 7.68E-07 |
| GO BP | GO:0046854 | inflammatory response | 11 | 6.52E-06 |
| GO BP | GO:0050729 | lymphocyte chemotaxis | 8 | 1.87E-05 |
| GO BP | GO:0048247 | positive regulation of leukocyte chemotaxis | 7 | 3.18E-05 |
| GO BP | GO:0060326 | cell chemotaxis | 10 | 3.64E-05 |
| GO BP | GO:0007186 | G-protein coupled receptor signaling pathway | 30 | 7.66E-05 |
| GO BP | GO:0071347 | cellular response to interleukin-1 | 10 | 8.04E-05 |
| GO BP | GO:0050918 | positive chemotaxis | 8 | 0.0001 |

**GO BP GO:0048015**
- EGFR, FGF7, FGF3, KL, FGF16, FGF10, IGF1, NPR3, CD19, FGF1, NRG1, NRG2, FGF2, PIK3R2
- CCL24, CCL11, EDN3, CCL13, CCL23, CCL14, CCL20, SAA1, EDN2, CXCL3, CCL7, S100A12
- EGFR, CD19, FGF3, FGF7, KL, FGF16, FGF10, FGF1, NRG1, FGF2, NRG2, PIK3R2
- CCL24, CCL11, CCL13, IL6, CCL23, CCL14, CCL20, CCL21, CCL7, S100A12

**GO BP GO:0030593**
- CCL24, CCL11, EDN3, CCL13, CCL23, CCL14, CCL20, SAA1, EDN2, CXCL3, CCL7, S100A12
- EGFR, CD19, FGF3, FGF7, KL, FGF16, FGF10, FGF1, NRG1, FGF2, NRG2, PIK3R2
- CCL24, CCL11, CCL13, IL6, CCL23, CCL14, CCL20, CCL21, CCL7, S100A12

**GO BP GO:0002548**
- CCL24, CCL11, CCL13, CCL23, CCL14, TNFSF4, FABP4, IL33, CCL7, S100A12
- CCL24, CCL11, CCL13, CCL23, CCL14, CCL20, SAA1, CCL21
- EDN3, IL6, CXCL5, EDN2, CXCL6, CXCL11, CXCL10
- CCL13, CCL14, SAA2, CXCL5, CCL20, CCL21, CXCL2, CXCL6, CCL28, CXCL10
- CXCL5, GNAI1, ADCYAP1R1, CXCL3, PTH1R, CXCL2, PPARG, OXTR, CXCL6, CXCL11, LGR6, CCL7, CCL10, CCL24, CCL23, CCL20, CCL21, DEFB1, PRLH, PTH2R, NPR1, PTGFR, CCL11, CCR8, CCL13, CCL14, CCR4, GPR17, PYY, OPRD1
- CCL24, CCL11, CCL13, IL6, CCL23, CCL14, CCL20, CCL21, CAMP, CCL7
- FGF7, NTFS, SAA2, SAA1, FGF10, ANGPT1, FGF2, SCG2
| GO BP      | GO:0000187 | activation of MAPK activity | 11 | 0.000272 | BMP2, NTF3, PAK3, SAA1, PROK1, IGF1, FGF10, FGF1, NRG1, FGF2, GHR |
|------------|------------|-----------------------------|----|----------|------------------------------------------------------------------|
| GO BP      | GO:0050731 | positive regulation of peptidyl-tyrosine phosphorylation | 10 | 0.000287 | IL6, FGF7, NTF3, IGF1, FGF10, ANGPT1, NRG1, ADIPOQ, GHR, IL11 |
| GO BP      | GO:0050679 | positive regulation of epithelial cell proliferation | 9  | 0.000306 | EGFR, IL6, FGF7, IGF1, FGF10, NRG1A3, FGF1, BMP5, BMP6 |
| GO BP      | GO:0071356 | positive regulation of peptidyl-tyrosine phosphorylation | 9  | 0.000306 | EGFR, IL6, FGF7, IGF1, FGF10, NRG1A3, FGF1, BMP5, BMP6 |
| GO BP      | GO:0071356 | positive regulation of peptidyl-tyrosine phosphorylation | 11 | 0.000354 | CCL24, CCL11, CCL13, IL6, CCL23, CCL14, CCL20, CCL21, CAMP, FABP4, CCL7, EGFR, FGFR3, FGF7, KL, FGF16, FGF10, ARTN, CCL7, CCL24, CCL11, CCL13, CCL23, CCL14, ADRB1, CCL20, ANGPT1, FGF1, NRG1, SHC3, NRG2, FGF2, PIK3R2 |
| GO BP      | GO:0043547 | positive regulation of MAPK activity | 22 | 0.000695 | CCL24, CCL11, CCL13, IL6, CCL23, CCL14, CCL20, CCL21, CAMP, FABP4, CCL7, EGFR, FGFR3, FGF7, KL, FGF16, FGF10, ARTN, CCL7, CCL24, CCL11, CCL13, CCL23, CCL14, ADRB1, CCL20, ANGPT1, FGF1, NRG1, SHC3, NRG2, FGF2, PIK3R2 |
| GO BP      | GO:0030335 | positive regulation of cell migration | 13 | 0.000814 | CCL24, CCL11, CCL13, IL6, CCL23, CCL14, CCL20, CCL21, CAMP, FABP4, CCL7, EGFR, FGFR3, FGF7, KL, FGF16, ARTN, FGF10, PAK3, ANGPT1, FGF1, SHC3, NRG1, NRG2, FGF2, SCG2 |
| GO BP      | GO:0000165 | MAPK cascade | 15 | 0.001016 | CCL24, CCL11, CCL13, IL6, CCL23, CCL14, CCL20, CCL21, CAMP, FABP4, CCL7, EGFR, FGFR3, FGF7, KL, FGF16, FGF10, FGF1, FGF2, PIK3R2 |
| GO BP      | GO:0036092 | phosphatidylinositol-3 phosphate biosynthetic process | 8  | 0.001132 | FGF3, FGF7, KL, FGF16, FGF10, FGF1, FGF2, PIK3R2 |
| GO BP      | GO:0048245 | eosinophil chemotaxis | 5  | 0.002254 | CCL24, CCL11, CCL13, CCL7, SCG2 |
| GO BP      | GO:0001501 | skeletal system development | 11 | 0.00272 | WFKKN1, BMP2, FGFR3, PTH1R, IGF1, GDF10, INHA, NPR3, BMPR1B, BMP5, BMP6 |
| GO BP      | GO:009409  | response to cold | 7  | 0.002859 | IL6, ADRB2, ADRB1, PPARG, TRH, VGF, CXCL10 |
| GO BP      | GO:0043410 | positive regulation of MAPK cascade | 9  | 0.003198 | LEP, BMP2, IL6, ADRB2, FGFR3, IGF1, FGF10, NGFR, IL11 |

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GO:0000187: activation of MAPK activity
GO:0050731: positive regulation of peptidyl-tyrosine phosphorylation
GO:0050679: positive regulation of epithelial cell proliferation
GO:0071356: positive regulation of peptidyl-tyrosine phosphorylation
go:0043547: positive regulation of MAPK activity
GO:0030335: positive regulation of cell migration
GO:0000165: MAPK cascade
GO:0036092: phosphatidylinositol-3 phosphate biosynthetic process
go:0048245: eosinophil chemotaxis
go:0001501: skeletal system development
GO:009409: response to cold
GO:0043410: positive regulation of MAPK cascade
| GO BP | GO:0071346 | cellular response to interferon-gamma | 8  | 0.003249 | CCL24, CCL11, CCL13, CCL23, CCL14, CCL20, CCL21, CCL7 |
| GO BP | GO:0006953 | acute-phase response | 7  | 0.004667 | ORM1, IL6, SAA2, SAA1, TFR2, ORM2, EPO |
| GO BP | GO:0010862 | positive regulation of pathway-restricted SMAD protein phosphorylation | 7  | 0.016248 | INHBA, BMP2, GDF10, INHA, BMP5, BMP8A, BMP6 |
| GO BP | GO:0007204 | positive regulation of cytosolic calcium ion concentration | 10 | 0.018019 | EDNRB, CCR8, SAA1, CCR4, EDN2, PTH1R, TAC1, OXTR, PTGFR, CCL28 |
| GO BP | GO:0030509 | BMP signaling pathway | 8  | 0.022775 | BMP2, TGFBR3, GDF10, BMPR1B, GREM2, BMP5, BMP8A, BMP6 |
| GO BP | GO:0042742 | defense response to bacterium | 10 | 0.034033 | LALBA, SLC11A1, DEFB132, CCL20, CAMP, IGHG, CXCL6, VGF, DEFB1, S100A12 |
| GO BP | GO:0001525 | angiogenesis | 12 | 0.035755 | LEPR, ANGPTL6, PTGS2, PROK1, LEPR, FGFI, ANGPT1, ADM2, ESM1, FGF1, TMPRSS6, SCG2 |
| GO BP | GO:0050829 | defense response to Gram-negative bacterium | 7  | 0.036147 | LALBA, SLC11A1, IL6, RNASE7, CAMP, TAC1, DEFB1 |
| GO BP | GO:0042127 | regulation of cell proliferation | 11 | 0.039403 | TNFRSF10D, CXCL3, CXCL2, TNFRSF18, SCGB3A1, NGFR, CXCL6, INHA, CXCL11, NR5A2, CXCL10 |
| GO BP | GO:0051897 | positive regulation of protein kinase B signaling | 8  | 0.044015 | LEPR, EGFR, IL6, CCL21, ANGPT1, NRG1, FGFI, THPO |
| GO CC | GO:0005576 | extracellular region | 94 | 3.01E-48 | CGA, EDN3, FGF7, IL9R, FAM3D, MASP2, LEPR, EDN2, FGFI, THPO |
SEMA3A, FGF1, NRG1, NRG2, FGF2, PRLH, GHR, IL27, CAMP, ARTN, INHA, MMP12, IL20, PROC, INHBA, AMH, PROK1, IGHE, NGFR, CTSG, RBP4, WIF1NN1, FGFR3, CXC15, CXC13, CXC12, TAC1, CXC16, IL33, ESM1, TRH, CCL28, GREM2, CCL7, ANGPTL7, IL17D, CCL23, IL17B, CCL20, CCL21, ALB, ICOS, TNFRSF18, PTX3, DEFBI, EPO, THPO, BMP2, IL6, LCN12, NTf4, DEFBI32, NTf3, KL, IGF1, PTGFR, ADIPOQ, S100A12, CCL11, LEP, ORM1, CCL13, CCL14, PENK, NTS, S100B, TGFB3, CMA1, ADM2, PYY, BMP5, ORM2, IL22RA2, BMP8A, BMP6 EDN3, IL9R, EDN2, FGF16, FGF10, VGF, CXC111, IL11, CXC110, SCT, OGN, SAA2, SEMA3G, SAA1, SEMA3D, ANGPT1, SEMA3A, FGF1, NRG1, NRG2, FGF2, LTA, GHR, EGFR, IL27, CAMP, ARTN, IL20, PROC, TNFRSF9, AMH, UMODL1, CST4, ULBP2, SCGB3A1, CTSG, LALBA, MIA, RBP4, CXC15, CXC13, CXC12, TAC1, CXC16, IL33, CCL28, GREM2, CCL7, CCL24, IL17D, PCSK1, CCL23, IL17B, CCL20, CCL21, ALB, ANGPTL1, PTX3, DEFBI, SCG2, EPO, THPO, BMP2, IL6, TNFSF4, KL, IGF1, ADIPOQ, TMPRSS6, CCL11, LEP, ORM1, TSLP, CCL13, CCL14, S100B, TGFB3, GDF10, PYY, BMP5, ORM2, IL22RA2, BMP8A, BMP6 AVP2, IL9R, FGFR3, PLXNA4, TFR2, ADCYAP1R1, TACR1, PTH1R, OXTR, TNFRSF8, LGR6, MARCO, SLC11A1, EDNRB, ICOS, TNFRSF18, NRG1, GHR, TNFSF4, OLRI, PTH2R, KL, LIFR, NPR1, CD1A, NPR3, PTGFR, CCR8, TNFRSF9, ADRB2, ADRB1, CD19, SEMA6D, TNFRSF10D, SSTR1, CCR4, TGFB3, GPR17, NGFR, BMPR1B, OPRTD1 EGFR, ADRB2, OLRI, LEPR, ADCYAP1R1, PTH1R, NR3C2, LIFR, NPR1, TGFB3, BMPR1B, GHR TNFRSF9, IL6, CD19, UMODL1, CCR4, ICOS, TFR2, IGHE, TGFB3, NRG1, PDCDI, CXC110
| GO MF | GO:0008083 | growth factor activity | 27 | 4.83E-21 |
|-------|------------|------------------------|----|-----------|
|       |            | MIA, IL6, BMP2, NTF4, FGF7, NTF3, FGF16, ARTN, FGF10, IGF1, INHA, VGF, IL1, LEP, OGN, AMH, INHBA, PROK1, GDF10, FGF1, NRG1, NRG2, FGF2, BMP5, BMP6, BMP8A, THPO |
| GO MF | GO:0005125 | cytokine activity | 25 | 1.64E-17 |
|       |            | IL6, BMP2, TNFSF4, FAM3D, IL27, IL33, INHA, GREM2, ADIPOQ, IL11, IL20, TSLP, IL17D, INHBA, IL17B, GDF10, SCGB3A1, NRG1, FGF2, LTA, BMP5, SCG2, BMP6, BMP8A, THPO |
| GO MF | GO:0008009 | chemokine activity | 15 | 3.85E-14 |
|       |            | CXCL5, CXCL3, CXCL2, CXCL6, CXCL11, CCL28, CCL7, CXCL10, CCL24, CCL11, CCL13, CCL23, CCL14, CCL20, CCL21 |
| GO MF | GO:0005179 | hormone activity | 17 | 1.49E-12 |
|       |            | EDN3, CGA, KL, EDN2, IGF1, INHA, VGF, ADIPOQ, LEP, AMH, SCT, INHBA, ADM2, PYY, PRLH, THPO, EPO |
| GO MF | GO:0046934 | phosphatidylinositol-4,5-bisphosphate 3-kinase activity | 12 | 3.2E-08 |
|       |            | EGFR, CD19, FGFR3, FGF7, KL, FGF16, FGF10, FGF1, NRG1, FGF2, NRG2, PIK3R2 |
| GO MF | GO:0005088 | Ras guanyl-nucleotide exchange factor activity | 14 | 1.73E-07 |
|       |            | EGFR, FGFR3, FGF7, KL, FGF16, ARTN, FGF10, ADRB1, ANGPT1, FGF1, SHC3, NRG1, NRG2, FGF2 |
| GO MF | GO:0005160 | transforming growth factor beta receptor binding | 9 | 1.01E-05 |
|       |            | AMH, INHBA, BMP2, TGFB3, GDF10, INHA, BMP5, BMP8A, BMP6 |
| GO MF | GO:0008201 | heparin binding | 14 | 1.05E-05 |
|       |            | FGF7, FGF10, CXCL6, CXCL11, GREM2, CCL7, CXCL10, OGN, CCL23, SAA1, TGFB3, FGF1, FGF2, CTSG |
| GO MF | GO:0016303 | phosphatidylinositol-4,5-bisphosphate 3-kinase activity | 8 | 0.000284 |
|       |            | FGFR3, FGF7, KL, FGF16, FGF10, FGF1, FGF2, PIK3R2 |
| GO MF | GO:0042056 | chemotactic activity | 7 | 0.000307 |
|       |            | FGF7, NTF3, SAA2, SAA1, FGF10, FGF2, SCG2 |
| GO MF | GO:0017046 | peptide hormone | 7 | 0.000307 |
|       |            | EDNRB, INHBA, PTH1R, NPR1, OXTR, NPR3, GHR |
| GO MF | GO:0005102 | receptor binding | 17 | 0.000715 | EDN3, BMP2, TNFSF4, NTF3, IL27, ARTN, TAC1, CNTFR, INHA, ADIPOQ, CXCL10, AMH, CCL13, ANGPTL1, NRG1, NRG2, LTA |
|-------|-------------|------------------|----|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GO MF | GO:0005104 | fibroblast growth factor receptor binding | 6  | 0.002917  | FGF7, KL, FGF16, FGF10, FGF1, FGF2 |
| GO MF | GO:0048020 | CCR chemokine receptor binding | 6  | 0.003698  | CCL24, CCL11, CCL13, CCL14, CCL20, CCL21 |
| GO MF | GO:0005184 | neuropeptide hormone activity | 6  | 0.014796  | NTS, PENK, PYY, TRH, VGF, PRLH |