| | | | | | | | | Up- | -regu | lated s | signalir | ng in a | act | | | | | | | | 1 | | | | | | | | Do | wn–re | egulate | ed sig | naling | in act | | | | | | | _ |
|-------------------------------|----------------|----------------|---------------|---------------|---------------|-----------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|---------------|-------------|---------------|------------------|----------------------|------------------|------------------------------|--|----------------|----------------|---------------|----------------|---------------|---------------|---------------|-------------|---------------|------------|------------|---------------|---------------|-----------------|---------------|---------------|------------------------------------|---------------|---|
| VCAM1 – (ITGA4+ITGB7) - | • | • | • | • | • | • | | • | | • | • | • | | • | | • | | _ | • | • | | VCAM1 – (ITGA4+ITGB7) - | | • | • | • | • | • | • | | • | | | | • | | • | | • | • | |
| VCAM1 – (ITGA4+ITGB1) - | | | | | | | | | | | | | | | | | | | | | | VCAM1 – (ITGA4+ITGB1) - TIGIT – NECTIN2 - | | • | | | • | • | • | | | | | | | | | | | | |
| v Caivi I — (11 GA4+11 GB1) - | | | | | | | | | | | | | | | | | | | | | | SEMA7A – PLXNC1 - | | | | | | | • | | | | • | | • | | | | | | |
| TIGIT – NECTIN2 - | • | • | | | • | • | | • | | | | | | | | | | | | | | SEMA7A – (ITGB1+ITGA1) - SEMA4D – PLXNB2 - | | | | | | | | | | | • | | • | | | • | | | |
| SEMA4D – PLXNB2 - | • | • | • | • | • | • | • | • | • | • | • | | • | | | | • | | • | | | SEMA4D – PLXNB2 - SEMA4A – PLXNB2 - | | • | | • | | | | | | | | | • | | • | • | • | | |
| SEMA4A – PLXNB2 - | | | | | | | • | • | | | | | • | • | | • | | | | | | SEMA4A – (NRP1+PLXNA1) - | | | | | | | • | | | | | | • | | • | | | • | |
| | | | | | | | | | | | | | | | | | | | | | | DLL1 – NOTCH2 - DLL1 – NOTCH3 - | | | | | | | | | • | | | | | | | | | | |
| SELL – CD34 - | | | | | • | | • | • | • | | | | • | | • | • | | | • | • | | NEGR1 – NEGR1 - | | | | | | | | | • | | | | | | • | | | | |
| MPZL1 – MPZL1 - | | | | | | | • | • | | | | | | • | | • | | | | | | NCAM1 – FGFR1 - | | | | | | • | • | | • | | | | | | | | | | |
| ITGB2 – ICAM1 - | | | | | | • | | • | | | | | • | • | | • | | | | | | MPZL1 – MPZL1 - JAM3 – JAM3 - | | | | | | | | | | • | • | | • | | • | | | | |
| CD99 – CD99 - | • | • | | | • | • | • | • | | | • | | | | • | | | | | | | JAM3 – JAM2 - | | | | | | | | | | • | • | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | F11R – JAM3 - F11R – JAM2 - | | | | | | | | | | | | | • | | • | | | | |
| CD46 – JAG1 - | | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | | • | • | | ITGB2 – ICAM1 - | | | | | | • | • | | | | | • | | | • | | | | |
| CD40LG – CD40 - | • | • | | | | | | | | | | | | | | | | | | | | CD99 – CD99L2 - | | • | | • | | • | • | | • | | • | | • | | • | | • | • | |
| CD226 – NECTIN2 - | • | • | | • | • | • | | | • | • | | | | | | • | | | | | | CD99 – CD99 - CD40LG – CD40 - | | • | | | • | | | | | • | | | | • | | | | | |
| 1440 | | | | | | | | | | | | | | | | | | | | | | CD226 – NECTIN2 - | | • | | • | • | • | | • | • | | | | | | • | | | | |
| LAMC1 – DAG1 - | | | | | | | | | | | | | | | | | | | | • | | LAMC1 - DAG1 - | | | | | | | | | | | | | | | | | | • | |
| THBS1 - CD47 - | | | | | | | | | | | | | | | | | | | | | | THBS1 – CD47 - COL9A3 – CD44 - | | | | | | | • | | | | • | | | | | | | • | |
| COL4A4 – CD44 - | | | | | | | | | | | • | • | | | | | | | | • | | COL9A2 – CD44 - | | | | | | | | | • | | | | • | | • | | | | |
| COL4A4 – (ITGA1+ITGB1) - | | | | | | | | | | | • | • | | | | | | | | • | | COL4A4 – CD44 - COL4A3 – CD44 - | | | | | | | | | | | • | | | | | | • | • | |
| ` , | | | | | | | | | | | | | | | | | | | | | p–value ● 0.01 < p < 0.05 | COL9A3 – (ITGA1+ITGB1) - | | | | | | | • | | | | • | | | | | | | • | |
| LGALS9 – CD44 - | | | | | | | • | | | | • | | | | • | • | • | • | | | p < 0.01 | COL9A2 – (ITGA1+ITGB1) - | | | | | | | | | • | | | | • | | • | | | | |
| BTLA – TNFRSF14 - | | | | | | | | | | | • | • | | | | • | • | • | | | Commun. Prob. | COL4A4 – (ITGA1+ITGB1) - COL4A3 – (ITGA1+ITGB1) - | | | | | | | | | | | • | | | | | | • | • | |
| GAS6 – AXL - | | | | | | | | | | | | | | • | | • | | | | • | | LGALS9 – CD44 - | | | | | | | • | | | • | | | • | • | • | • | • | | |
| MDK – LRP1 - | | | | | | | | | | | | | | | | | | | | • | min | GAS6 – AXL - GZMA – PARD3 - | | | | | | • | • | | | | | | • | | • | | | • | |
| WIDIX - EXT 1 | | | | | | | | | | | | | | | | | | | | | | GZMA – F2R - | | | | | • | | | | | | | | | | | | | | |
| MDK – SDC2 - | | | | | | | | | | | | | | | | | | | | • | | MDK – LRP1 - | | | | | | | | | | | | | | | | | | • | |
| NAMPT – INSR - | • | | • | | • | • | • | • | • | • | • | • | • | | • | • | • | • | • | • | | NAMPT – INSR - TNFSF12 – TNFRSF12A - | | • | • | | • | • | | • | • | • | • | | • | • | • | • | • | • | |
| RETN – CAP1 - | | | | | | | | | | | | | • | • | | | | | | | | FASL – FAS - | | | | | | • | • | | | | | | | | | | | | |
| TNFSF12 – TNFRSF12A - | | • | | | | | | | | | | • | | | | | | | | | | TNFSF14 – TNFRSF14 - TNFSF14 – LTBR - | | | | | • | | • | | • | | | | | | | | | | |
| INFSFIZ - INFRSFIZA - | | | | | | | | | | | | | | | | | | | | | | TNF – TNFRSF1B - | | | | | | | • | | | | • | | | | | | | | |
| LTA – TNFRSF14 - | | | | | | | • | • | | | | | | | | | | | | | | TNF – TNFRSF1A - | | | | | | | • | | | | • | | | | | | | | |
| LTA – TNFRSF1B - | | | | | | | | • | | | | | | | | | | | | | | MIF – ACKR3 - CXCL12 – ACKR3 - | | • | • | • | | • | | | • | • | • | | • | • | • | • | • | • | |
| LTA – TNFRSF1A - | | | | | | | • | • | | | | | | | | | | | | | | IGF1 – IGF1R - | | | | | | | | | | | | | | | • | | | • | |
| | | | | | | | | | | | | | | | | | | | | | | PDGFD – PDGFRB - PDGFC – PDGFRA - | | | | | | • | | | | | | | • | | • | | | | |
| TNF – TNFRSF1B - | | | | | | | | • | | | | • | | | | | | | | | | HBEGF – EGFR - | | | | | | | | | | | | • | | | | | | | |
| TNF – TNFRSF1A - | _ | | | | | | • | • | | | | • | | | | | | | | | | AREG – (EGFR+ERBB2) - | | • | | • | | • | • | | • | | • | | • | | • | | • | • | |
| IFNG – (IFNGR1+IFNGR2) - | | | | | • | • | | | | | | | | | | | | | | | | AREG – EGFR - WNT5B – FZD7 - | • | • | • | • | • | • | • | | • | • | • | | | | • | | • | | |
| OSM - (OSMR+IL6ST) - | | | | | | | | | | | | | • | | | | | | | | | WNT5A – FZD7 - | | | | | | | | | | | | | • | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | WNT10A – (FZD7+LRP6) - WNT10A – (FZD4+LRP6) - | | | | | | | | | | | | | | | | | | • | |
| OSM – (LIFR+IL6ST) - | | | | | | | | | | | | | • | | | | | | | | | WN110A – (FZD4+LRP6) - BMP6 – (BMPR1A+BMPR2) - | | | | | | | | | | | | | | | | | | • | |
| MIF – ACKR3 - | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | | BMP6 – (BMPR1A+ACVR2A) - | | | | | | | | | | | | | | | | | | • | |
| CXCL12 – ACKR3 - | | | | | | | | | | | | | | | | • | | | | | | BMP6 – (ACVR1+BMPR2) - GDF7 – (BMPR1A+BMPR2) - | | | | | | | | | | | • | | | | | | | • | |
| DDCED BDCESS | | | | | | | | | | | | | | | | | | | | | | GDF7 – (BMPR1A+ACVR2A) - | | | | | | | | | | | • | | | | | | | | |
| PDGFD – PDGFRB - | - (- | - (- | t) | <u></u> | t) | - (: | t) | | - (; | - (: | t) - | - (: | t) | - (: | t) - | (: | t) - | - (: | t) | <u></u> | | TGFB1 – (TGFBR1+TGFBR2) - | t) | - | (t) | -0 | • | | | t) | | t) | - (6 | - | | • | - (: | • | | | |
| | 16+RC (act | \sim | PI16+RC (act) | PI16+RC (res) | PI16+RC (act) | \sim | PI16+RC (act) | PI16+RC (res) | PI16+RC (act) | 16+RC (res) | PI16+RC (act) | PI16+RC (res) | PI16+RC (act) | 16+RC (res) | PI16+RC (act) | 16+RC (res) | PI16+RC (act) | 16+RC (res) | 16+RC (act) | 16+RC (res) | | | 16+RC (act) | 16+RC (res) | PI16+RC (act) | 16+RC (res) | PI16+RC (act) | PI16+RC (res) | | O | PI16+RC (res) | \circ | \circ | PI16+RC (act) | PI16+RC (res) | PI16+RC (act) | PI16+RC (res) | PI16+RC (act) | PI16+RC (res) PI16+RC (act) | PI16+RC (res) | |
| | CD4T -> PI16+R | CD4T -> PI16+F | CD8Tcm -> PI1 | CD8Tcm -> Pl1 | \ \ | Kcell -> PI16+F | GCB -> PI1 | GCB -> PI1 | ILC3 -> PI1 | ILC3 -> PI16+R | MBC -> PI1 | MBC -> PI1 | ^ |)C-1 -> PI16+R |)C-2 -> PI1 | ^ | naiveB -> PI1 | naiveB -> PI16+R | plasmaCell -> PI16+R | naCell -> PI16+R | | | CD4T -> PI16+R | CD4T -> PI16+R | CD8Tcm -> PI1 | 3Tcm -> PI16+R | ^ | ^ · | GCB -> PI16+R | ILC3 -> PI1 | ILC3 -> PI1 | MBC -> PI1 | MBC -> PI1 | , I |)C-1 -> PI1 | Mph/DC-2 -> PI1 | Ŷ | ٨ | naiveB -> PI1 plasmaCell -> PI1 | aCell -> PI1 | |
| | U | O | CD8 | CD8 | CTL/NKcell | CTL/NKcell | _ | _ | | _ | - | _ | Mph/DC-1 | Mph/DC-1 | Mph/DC-2 | Mph/DC-2 | n | บย | plasm | plasma | | | U | O | CD8 | CD8Tcm | CTL/NKcell | CTL/NKcell - | | _ | _ | | ~ | Mph/D | Mph/DC-1 | Mph/E | Mph/DC-2 | ns Su | ne plasme | plasma | |

p-value

0.01 p < 0.01

Commun. Prob.