**Table S3.** List of genes for top three 3-clique-2-bipartite modules.

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| --- | --- |
|  | List of Genes |
| BRCA-Module1 | ACAP1, CD2, CD247, CD3D, CD3E, CD5, CD96, CXCR3, GZMM, ITK, LY9, PTPRCAP, PYHIN1, S1PR4, SH2D1A, SIT1, SLA2, SLAMF1, SLAMF6, TBC1D10C, TBX21, TRAT1, UBASH3A, ZAP70 |
| BRCA-Module2 | CCL5, CD2, CD247, CD3D, CD3E, CD3G, CD96, CXCR3, GZMA, IKZF1, IL2RG, ITK, PRKCB, PTPRC, SH2D1A, SIRPG, SLA2, SPN, TBX21, THEMIS, TRAT1, ZNF831 |
| BRCA-Module3 | CD247, CD3G, CD53, CD96, CXCR6, DOCK2, EVI2B, FYB, GZMA, IKZF1, ITK, LCP2, NCKAP1L, PLEK, PRF1, PTPRC, SH2D1A, SLA2, SLAMF6, TBX21 |
| COAD-Module1 | APBB1IP, ARHGAP30, ARHGAP9, BTK, C3AR1, CD53, CD84, CD86, CLEC7A, CSF1R, CYBB, DOCK10, DOCK2, FPR3, HCK, HCLS1, IKZF1, IL10RA, ITGAL, ITGB2, KLHL6, LAIR1, LAPTM5, LRRC25, MAP4K1, MNDA, NCKAP1L, PIK3R5, PTPRC, RASAL3, SASH3, SIGLEC7, SIRPB2, SLA, SLAMF8, TRAF3IP3, WAS |
| COAD-Module2 | APBB1IP, ARHGAP30, BTK, C3AR1, CD4, CD53, CD86, CLEC7A, CSF1R, CYTH4, DOCK2, FPR3, HCK, HCLS1, IKZF1, IL10RA, ITGAL, ITGB2, ITK, LAIR1, LAPTM5, LILRB1, LRRC25, MNDA, NCKAP1L, PIK3R5, PTPRC, SASH3, SIGLEC7, SIGLEC9, SIRPB2, SLA, SLAMF8, SPI1, TRAF3IP3, WAS |
| COAD-Module3 | APBB1IP, ARHGAP30, ARHGAP9, C3AR1, CD163, CD53, CD84, CD86, CLEC7A, DOCK2, FPR3, HAVCR2, HCK, HCLS1, IL10RA, ITGAL, ITGB2, LAIR1, LAPTM5, LILRB1, LILRB4, LRRC25, MAP4K1, MNDA, MYO1G, PIK3R5, PTPRC, RASAL3, SASH3, SIGLEC7, SLA, SLAMF8, TBC1D10C, TRAF3IP3, WAS |
| GBM-Module1 | ARHGAP30, ARL11, C1QB, C1QC, CD4, CD53, CSF1R, DOCK2, FCER1G, FCGR3A, HCK, LAIR1, LAPTM5, MYO1F, NCF4, NCKAP1L, PLCG2, SASH3, SPI1, SYK, TYROBP, VAMP8, VAV1 |
| GBM-Module2 | ARHGAP30, ARL11, C1QA, C1QB, C1QC, CD33, CD4, CD53, CD86, CSF1R, DOCK2, FCER1G, ITGB2, LAIR1, LAPTM5, MYO1F, NCF4, NCKAP1L, SASH3, SYK, TYROBP, VAV1 |
| GBM-Module3 | ARHGAP30, C1QC, CD4, CD53, CD68, DOCK2, DOCK8, FERMT3, HCK, IKZF1, ITGB2, LAIR1, LAPTM5, MYO1F, NCKAP1L, PLCG2, SASH3, SPI1, STXBP2, VAV1 |