**S3 Table. The PPI network information performed for pathway**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Module  | number of nodes | number of edges | average node degree | avg. local clustering coefficient | expected number of edges | PPI enrichment p-value |
| Module 13 (darkmagenta) | 62 | 838 | 27 | 0.787 | 201 | < 1.0x 10-16 |
| Module 14 (darkred) | 74 | 833 | 22.5 | 0.79 | 198 | < 1.0x 10-16 |
| Module 19 (darkgrey) | 68 | 225 | 6.62 | 0.745 | 142 | 8.59 x 10-11 |
| Module 23 (white) | 66 | 302 | 9.15 | 0.783 | 133 | < 1.0x 10-16 |
| Module 27 (paleturquoise) | 64 | 1142 | 35.7 | 0.876 | 188 | < 1.0x 10-16 |
| Module 30 (cyan) | 99 | 766 | 15.5 | 0.663 | 306 | < 1.0x 10-16 |