|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Catelogy | Rank methods in cytoHubba | | | | | | | |
|  | MCC | MNC | Degree | EPC | Closeness | | Radiality |
| Gene symbol top  15 | ubr4 | skp2 | ubr4 | hecw2a | ubr4 | cbl | |  |
| skp2 | socs3a | skp2 | HERC1 | cbl | waslb | |  |
| fbxl14a | fbxl14a | kbtbd8 | ube2q2 | alcama | LOC561737 | |  |
| fbxo30a | fbxo30a | socs3a | herc2 | skp2 | reps1 | |  |
| kbtbd8 | kbtbd8 | fbxl14a | skp2 | waslb | alcama | |  |
| plzfa | plzfa | fbxo30a | fbxl14a | kbtbd8 | fynb | |  |
| socs3a | trip12 | plzfa | cdc34b | trip12 | actr2a | |  |
| hecw2a | ube3c | trip12 | ube3c | socs3a | actr2b | |  |
| HERC1 | cdc34b | LTN1 | uba1 | fbxl14a | arrb2b | |  |
| ube2q2 | uba1 | ube3c | ube2kb | fbxo30a | trioa | |  |
| herc2 | hectd1 | cdc34b | trip12 | plzfa | igf2r | |  |
| cdc34b | hecw2a | uba1 | ubr4 | hectd1 | cltcb | |  |
| LTN1 | HERC1 | hectd1 | hectd1 | ube3c | ap2a1 | |  |
| ube3c | ube2q2 | alcama | alcama | LTN1 | hip1 | |  |
| uba1 | herc2 | hecw2a | fbxo30a | LOC561737 | agfg1a | |  |

Supplementary Table6. Hub genes ranked by the Degree method in cytoHubba