Table S1 50 unique different colors were identified and represented by WGCNA analysis

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module** | **Color** | **Size** | **Module** | **Color** | **Size** |
| 0 | grey | 13240 | 26 | darkorange | 117 |
| 1 | turquoise | 3070 | 27 | white | 116 |
| 2 | blue | 1311 | 28 | skyblue | 112 |
| 3 | brown | 897 | 29 | saddlebrown | 109 |
| 4 | yellow | 879 | 30 | steelblue | 107 |
| 5 | green | 810 | 31 | paleturquoise | 103 |
| 6 | red | 723 | 32 | violet | 97 |
| 7 | black | 695 | 33 | darkolivegreen | 92 |
| 8 | pink | 563 | 34 | darkmagenta | 87 |
| 9 | magenta | 531 | 35 | sienna3 | 86 |
| 10 | purple | 313 | 36 | yellowgreen | 85 |
| 11 | greenyellow | 263 | 37 | skyblue3 | 80 |
| 12 | tan | 240 | 38 | plum1 | 76 |
| 13 | salmon | 237 | 39 | orangered4 | 73 |
| 14 | cyan | 236 | 40 | mediumpurple3 | 71 |
| 15 | midnightblue | 217 | 41 | lightsteelblue1 | 71 |
| 16 | lightcyan | 184 | 42 | lightcyan1 | 69 |
| 17 | grey60 | 181 | 43 | ivory | 68 |
| 18 | lightgreen | 173 | 44 | floralwhite | 57 |
| 19 | lightyellow | 166 | 45 | darkorange2 | 54 |
| 20 | royalblue | 160 | 46 | brown4 | 52 |
| 21 | darkred | 148 | 47 | bisque4 | 49 |
| 22 | darkgreen | 144 | 48 | darkslateblue | 49 |
| 23 | darkturquoise | 142 | 49 | plum2 | 48 |
| 24 | darkgrey | 137 | 50 | thistle2 | 42 |
| 25 | orange | 135 |  |  |  |

Table S2 Hub genes from of the saddlebrown module

|  |  |  |  |
| --- | --- | --- | --- |
| **Probe** | **Gene** | **Gene\_ID** | **K\_within** |
| ILMN\_1718977\_GADD45B | GADD45B | ENSG00000099860 | 1.000 |
| ILMN\_3245103\_RNU11 | RNU11 | ENSG00000270103 | 0.936 |
| ILMN\_3244646\_RNU1G2 | RNU1G2 |  | 0.922 |
| ILMN\_3236653\_RNU1.5 | RNU1.5 |  | 0.916 |
| ILMN\_3246273\_RNU1.3 | RNU1.3 | ENSG00000207513 | 0.865 |
| ILMN\_3245678\_RNU1A3 | RNU1A3 |  | 0.839 |
| ILMN\_3237617\_RNU5A | RNU5A |  | 0.769 |
| ILMN\_3240594\_RNU4ATAC | RNU4ATAC | ENSG00000264229 | 0.760 |
| ILMN\_3309453\_RNU4.1 | RNU4.1 |  | 0.751 |
| ILMN\_3236713\_SNHG1 | SNHG1 | ENSG00000255717 | 0.742 |
| ILMN\_3242315\_SNORD3D | SNORD3D | ENSG00000199663 | 0.724 |
| ILMN\_1721833\_IER5 | IER5 | ENSG00000162783 | 0.716 |
| ILMN\_3247018\_SNORA67 | SNORA67 | ENSG00000252473 | 0.713 |
| ILMN\_1780769\_TUBB2C | TUBB2C | ENSG00000188229 | 0.663 |
| ILMN\_3246433\_RNY5 | RNY5 | ENSG00000252310 | 0.638 |
| ILMN\_1694327\_LOC285176 | LOC285176 |  | 0.630 |
| ILMN\_1719695\_NFKBIZ | NFKBIZ | ENSG00000144802 | 0.629 |
| ILMN\_1750100\_TUBB4Q | TUBB4Q | ENSG00000251297 | 0.596 |
| ILMN\_3235404\_SNORA57 | SNORA57 | ENSG00000223027 | 0.595 |
| ILMN\_1663092\_CITED2 | CITED2 | ENSG00000164442 | 0.587 |
| ILMN\_2096747\_SNORA33 | SNORA33 | ENSG00000252045 | 0.586 |
| ILMN\_3240220\_RNU1F1 | RNU1F1 |  | 0.581 |
| ILMN\_3238078\_SNORA45 | SNORA45 | ENSG00000212607 | 0.558 |
| ILMN\_1728106\_TNF | TNF | ENSG00000232810 | 0.537 |
| ILMN\_3238554\_SNORA80 | SNORA80 | ENSG00000200792 | 0.524 |
| ILMN\_3272590\_LOC100129975 | LOC100129975 |  | 0.515 |
| ILMN\_2085525\_SNORA32 | SNORA32 | ENSG00000207503 | 0.514 |
| ILMN\_1730773\_SNORA70 | SNORA70 | ENSG00000253042 | 0.512 |
| ILMN\_3239574\_SNORD3A | SNORD3A | ENSG00000263934 | 0.506 |
| ILMN\_1794017\_SERTAD1 | SERTAD1 | ENSG00000197019 | 0.495 |
| ILMN\_1679727\_CLK1 | CLK1 | ENSG00000013441 | 0.491 |
| ILMN\_2072391\_SNORD31 | SNORD31 | ENSG00000201847 | 0.480 |
| ILMN\_1689400\_CLK1 | CLK1 | ENSG00000013441 | 0.453 |
| ILMN\_1673181\_SNORD100 | SNORD100 | ENSG00000221500 | 0.452 |
| ILMN\_1708934\_ADM | ADM |  | 0.115 |

Table S3 The module membership of these 12 genes

|  |  |  |
| --- | --- | --- |
| **Module** | **K\_within** | **Proble** |
| saddlebrown | 0.716 | ILMN\_1721833\_IER5 |
| saddlebrown | 0.629 | ILMN\_1719695\_NFKBIZ |
| saddlebrown | 0.587 | ILMN\_1663092\_CITED2 |
| saddlebrown | 0.537 | ILMN\_1728106\_TNF |
| saddlebrown | 0.495 | ILMN\_1794017\_SERTAD1 |
| saddlebrown | 0.115 | ILMN\_1708934\_ADM |
| lightsteelblue1 | 0.180 | ILMN\_1770260\_NFKBIZ |
| grey | NA | ILMN\_1666269\_CTSZ |
| grey60 | 0.371 | ILMN\_1742001\_CD160 |
| green | 0.436 | ILMN\_1777190\_CFD |
| darkolivegreen | 0.871 | ILMN\_1782305\_NR4A2 |
| darkolivegreen | 0.850 | ILMN\_2339955\_NR4A2 |
| brown4 | 0.219 | ILMN\_2320513\_APBB3 |
| brown | 0.132 | ILMN\_1680692\_NUCKS1 |
| black | 0.263 | ILMN\_1740772\_APBB3 |