**Table S3. The GO enrichment analysis of DE mRNAs.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Function | GO terms | Gene number | UP-regulated | DOWN-regulated | p value |
| Hormone synthesis and regulation | response to hormone | 28 | 19 | 9 | 0.004354 |
| response to steroid hormone | 13 | 8 | 5 | 0.009713 |
| negative regulation of intracellular steroid hormone receptor signaling pathway | 5 | 2 | 3 | 0.020998 |
| regulation of intracellular steroid hormone receptor signaling pathway | 6 | 3 | 3 | 0.035261 |
| hormone-mediated signaling pathway | 10 | 8 | 2 | 0.049685 |
| intracellular steroid hormone receptor signaling pathway | 6 | 4 | 2 | 0.059886 |
| steroid hormone mediated signaling pathway | 6 | 4 | 2 | 0.059886 |
| cellular response to steroid hormone stimulus | 6 | 4 | 2 | 0.068861 |
| steroid metabolic process | 6 | 1 | 5 | 0.156328 |
| regulation of steroid metabolic process | 3 | 1 | 2 | 0.333417 |
| steroid biosynthetic process | 2 | 0 | 2 | 0.34677 |
| hormone secretion | 2 | 1 | 1 | 0.359172 |
| positive regulation of intracellular steroid hormone receptor signaling pathway | 1 | 1 | 0 | 0.40445 |
| regulation of secretion | 10 | 3 | 7 | 0.411945 |
| endocrine hormone secretion | 1 | 0 | 1 | 0.463123 |
| regulation of hormone levels | 5 | 3 | 2 | 0.472786 |
| hormone metabolic process | 1 | 0 | 1 | 0.54837 |
| regulation of hormone secretion | 2 | 1 | 1 | 0.63574 |
| Growth | growth | 20 | 10 | 10 | 0.016486 |
| tissue development | 45 | 23 | 22 | 0.030739 |
| cell proliferation | 23 | 9 | 14 | 0.040928 |
| response to growth factor | 11 | 5 | 6 | 0.047896 |
| animal organ development | 69 | 35 | 34 | 0.058599 |
| organ maturation | 1 | 0 | 1 | 0.066741 |
| cellular response to growth factor stimulus | 8 | 4 | 4 | 0.086159 |
| negative regulation of cellular response to growth factor stimulus | 1 | 0 | 1 | 0.129036 |
| organ growth | 1 | 1 | 0 | 0.267213 |
| regulation of multicellular organism growth | 2 | 1 | 1 | 0.520627 |
| regulation of growth | 12 | 7 | 5 | 0.563437 |
| negative regulation of growth | 1 | 1 | 0 | 0.721778 |
| developmental growth | 3 | 1 | 2 | 0.768882 |
| regulation of developmental growth | 2 | 1 | 1 | 0.872635 |
| Reproduction | positive regulation of reproductive process | 3 | 1 | 2 | 0.074064 |
| male gamete generation | 11 | 4 | 7 | 0.294436 |
| multicellular organism reproduction | 14 | 7 | 7 | 0.35067 |
| multicellular organismal reproductive process | 13 | 6 | 7 | 0.398003 |
| reproductive process | 27 | 13 | 14 | 0.412347 |
| reproduction | 27 | 13 | 14 | 0.420603 |
| negative regulation of Wnt signaling pathway | 5 | 3 | 2 | 0.472786 |
| regulation of Notch signaling pathway | 2 | 1 | 1 | 0.488288 |
| canonical Wnt signaling pathway | 1 | 0 | 1 | 0.498996 |
| regulation of Wnt signaling pathway | 7 | 3 | 4 | 0.510612 |
| reproductive behavior | 1 | 1 | 0 | 0.516026 |
| multicellular organism reproductive behavior | 1 | 1 | 0 | 0.516026 |
| multi-organism reproductive process | 14 | 5 | 9 | 0.61273 |
| Wnt signaling pathway | 2 | 1 | 1 | 0.660906 |
| sexual reproduction | 12 | 3 | 9 | 0.697153 |
| positive regulation of Wnt signaling pathway | 2 | 0 | 2 | 0.824359 |
| developmental process involved in reproduction | 8 | 3 | 5 | 0.89518 |
| gonad development | 1 | 0 | 1 | 0.939481 |
| cellular process involved in reproduction in multicellular organism | 1 | 1 | 0 | 0.941547 |
| development of primary sexual characteristics | 1 | 0 | 1 | 0.941547 |
| reproductive structure development | 2 | 0 | 2 | 0.943315 |
| reproductive system development | 2 | 0 | 2 | 0.943315 |