Day 2 spherules most differentially expressed genes

Up-regulated

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Input ID | Product Description | Ortholog count | Length | # TM Domains | SignalP | GO Processes | FC | Unique |
| CIMG\_04613 | hypothetical protein -SOWgp | 3 | 324 | 0 | Y | N/A | 9.012 | Y |
| CIMG\_10264 | Aldehyde reductase | 1176 | 314 | 0 | N | oxidation-reduction process | 8.116 | N |
| CIMG\_09753 | ABC multidrug transporter | 569 | 1501 | 16 | N | transmembrane transport | 7.773 | N |
| CIMG\_10032 | expression library immunization antigen 1 - surface protein antigen | 96 | 224 | 0 | Y | N/A | 7.092 | N |
| CIMG\_10037 | copper transporter | 121 | 193 | 2 | N | copper ion transmembrane transport | 7.072 | N |
| CIMG\_01115 | thiamine thiazole synthase, thiamine thiazole synthase, variant | 170 | 328 | 0 | N | N/A | 6.901 | N |
| CIMG\_08103 | opsin 1 | 214 | 289 | 7 | N | ion transport | 6.870 | N |
| CIMG\_06250 | methyltransferase domain-containing protein | 51 | 320 | 1 | Y | N/A | 6.431 | Y |
| CIMG\_11522 | hypothetical protein - unique | 2 | 85 | 1 | N | N/A | 6.376 | Y |
| CIMG\_10007 | hypothetical protein - unique | 3 | 125 | 0 | N | N/A | 6.341 | Y |
| CIMG\_02628 | Arp2/3 complex subunit Arc16 | 199 | 312 | 0 | N | carbohydrate metabolic process | 6.158 | N |
| CIMG\_09539 | hypothetical | 136 | 387 | 0 | N | N/A | 5.989 | N |
| CIMG\_12484 | hypothetical protein - unique | 1 | 124 | 0 | N | N/A | 5.977 | Y |
| CIMG\_09750 | amino acid adenylation domain-containing protein | 1262 | 8032 | 0 | N | metabolic process | 5.898 | N |
| CIMG\_05758 | parasitic phase-specific protein PSP-1 | 458 | 279 | 7 | N | response to stress | 5.752 | N |
| CIMG\_11264 | hypothetical protein | 59 | 76 | 1 | Y | N/A | 5.693 | N |
| CIMG\_00534 | glycerate kinase | 37 | 437 | 1 | N | organic acid phosphorylation | 5.635 | N |
| CIMG\_10013 | hypothetical protein - unique | 0 | 114 | 0 | N | N/A | 5.586 | Y |
| CIMG\_01211 | Putative major facilitator superfamily (MFS) transporter | 11 | 553 | 13 | N | transmembrane transport | 5.294 | N |

Down-regulated

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gene ID | Product Description | Ortholog count | Length | # TM Domains | SignalP | Computed GO Processes | FC | Unique |
| CIMG\_03418 | CBF1-interacting co-repressor CIR domain-containing protein | 99 | 336 | 0 | N | N/A | -8.094 | N |
| CIMG\_01310 | 4-hydroxyphenylpyruvate dioxygenase | 183 | 399 | 0 | N | aromatic amino acid family metabolic process;oxidation-reduction process | -7.717 | N |
| CIMG\_07209 | Life-span regulatory factor domain-containing protein | 56 | 151 | 0 | N | N/A | -7.491 | N |
| CIMG\_03873 | Protoglobin domain-containing protein | 136 | 245 | 0 | N | N/A | -7.320 | N |
| CIMG\_07928 | SAM and PH domain-containing protein | 74 | 795 | 0 | N | N/A | -6.970 | N |
| CIMG\_03716 | Heat shock protein 30 | 115 | 238 | 0 | N | N/A | -6.904 | N |
| CIMG\_00925 | hypothetical protein - cell wall protein | 82 | 157 | 0 | Y | N/A | -6.903 | N |
| CIMG\_00284 | hypothetical protein | 5 | 118 | 0 | Y | N/A | -6.898 | Y |
| CIMG\_09232 | hypothetical protein | 59 | 571 | 1 | Y | N/A | -6.880 | Y |
| CIMG\_00099 | C2H2 finger domain-containing protein | 116 | 595 | 0 | N | N/A | -6.868 | N |
| CIMG\_08613 | metalloproteinase 7 | 4 | 357 | 0 | Y | proteolysis | -6.746 | N |
| CIMG\_12190 | hypothetical protein - unique | 1 | 137 | 0 | N | N/A | -6.689 | Y |
| CIMG\_03848 | DnaJ domain-containing protein | 68 | 536 | 0 | N | N/A | -6.660 | N |
| CIMG\_13167 | beta-glucosidase 5 | 94 | 489 | 0 | N | N/A | -6.588 | N |
| CIMG\_13284 | hypothetical protein - unique | 0 | 74 | 0 | N | N/A | -6.523 | Y |
| CIMG\_04597 | GPI anchored serine-threonine rich protein | 68 | 216 | 0 | Y | N/A | -6.467 | Y |
| CIMG\_00348 | endochitinase 2 | 317 | 897 | 0 | Y | carbohydrate metabolic process | -6.445 | N |
| CIMG\_10468 | hypothetical protein - unique | 3 | 132 | 0 | N | N/A | -6.370 | Y |
| CIMG\_00302 | hypothetical protein - unique | 74 | 228 | 0 | Y | N/A | -6.345 | Y |
| CIMG\_07925 | hypothetical protein - unique | 3 | 168 | 0 | N | N/A | -6.229 | Y |