Supplementary Table 1: Gene ontology

| GO biological process term                           | Term Hits | All genes | Annotated genes for term | All annotated genes | P (Fisher’s Exact Test) |
|------------------------------------------------------|-----------|-----------|--------------------------|---------------------|-------------------------|
| Metabolic process                                    | 39        | 67        | 7166                     | 22296               | 5.35E-05                |
| Organic substance metabolic process                  | 37        | 67        | 6644                     | 22296               | 6.37E-05                |
| Tissue development                                   | 17        | 67        | 1625                     | 22296               | 8.98E-06                |
| Small molecule metabolic process                     | 16        | 67        | 1428                     | 22296               | 7.48E-06                |
| Lipid metabolic process                              | 22        | 67        | 1048                     | 22296               | 6.98E-13                |
| Cellular lipid metabolic process                     | 19        | 67        | 799                      | 22296               | 4.47E-12                |
| Organophosphate metabolic process                    | 10        | 67        | 698                      | 22296               | 6.77E-05                |
| Monocarboxylic acid metabolic process                | 9         | 67        | 456                      | 22296               | 1.42E-05                |
| Small molecule biosynthetic process                  | 9         | 67        | 445                      | 22296               | 1.17E-05                |
| Supramolecular fiber organization                    | 8         | 67        | 444                      | 22296               | 8.25E-05                |
| Lipid biosynthetic process                           | 13        | 67        | 417                      | 22296               | 7.19E-10                |
| Striated muscle tissue development                   | 7         | 67        | 322                      | 22296               | 7.58E-05                |
| Fatty acid metabolic process                         | 9         | 67        | 304                      | 22296               | 5.65E-07                |
| Epidermis development                                | 8         | 67        | 265                      | 22296               | 2.18E-06                |
| Skin development                                     | 8         | 67        | 246                      | 22296               | 1.27E-06                |
| Steroid metabolic process                            | 7         | 67        | 220                      | 22296               | 7.04E-06                |
| Monocarboxylic acid biosynthetic process             | 5         | 67        | 140                      | 22296               | 9.22E-05                |
| Fatty acid derivative metabolic process              | 5         | 67        | 125                      | 22296               | 5.49E-05                |
| Actomyosin structure organization                    | 5         | 67        | 103                      | 22296               | 2.26E-05                |
| Fatty acid biosynthetic process                      | 5         | 67        | 98                       | 22296               | 1.79E-05                |
| Cellular component assembly involved in morphogenesis | 5         | 67        | 97                       | 22296               | 1.71E-05                |
| Isoprenoid metabolic process                         | 6         | 67        | 74                       | 22296               | 1.89E-07                |
| Muscle fiber development                             | 4         | 67        | 66                       | 22296               | 6.90E-05                |
| Triglyceride metabolic process                       | 4         | 67        | 65                       | 22296               | 6.52E-05                |
| Myofibril assembly                                   | 5         | 67        | 61                       | 22296               | 2.00E-06                |
| Sarcomere organization                               | 4         | 67        | 41                       | 22296               | 1.19E-05                |
| Isoprenoid biosynthetic process                      | 5         | 67        | 29                       | 22296               | 6.73E-08                |
| Cardiac myofibril assembly                           | 3         | 67        | 25                       | 22296               | 9.09E-05                |
| Skeletal myofibril assembly                          | 3         | 67        | 14                       | 22296               | 1.93E-05                |
| Skeletal muscle thin filament assembly               | 3         | 67        | 13                       | 22296               | 1.60E-05                |