

Table S8

| sd::Gal4>UAS::FH-cortoCD |                                                                                        |                    |               |          |              |            |  |
|--------------------------|----------------------------------------------------------------------------------------|--------------------|---------------|----------|--------------|------------|--|
| GO ID                    | Description                                                                            | Category           | GO CortoCD up | GO total | padj dh      | Enrichment |  |
| GO:0006412               | translation                                                                            | Biological process | 105           | 511      | 5.33000E-59  | 7.13183    |  |
| GO:0007052               | mitotic spindle organization                                                           | Biological process | 39            | 209      | 4.87000E-19  | 6.47665    |  |
| GO:0000022               | mitotic spindle elongation                                                             | Biological process | 35            | 84       | 5.92000E-30  | 14.46180   |  |
| GO:0022008               | neurogenesis                                                                           | Biological process | 29            | 557      | 8.61400E-03  | 1.80707    |  |
| GO:0000398               | nuclear mRNA splicing, via spliceosome                                                 | Biological process | 28            | 417      | 3.88092E-04  | 2.33053    |  |
| GO:0009408               | response to heat                                                                       | Biological process | 23            | 93       | 8.59000E-14  | 8.58375    |  |
| GO:0007411               | axon guidance                                                                          | Biological process | 21            | 278      | 6.46852E-04  | 2.62184    |  |
| GO:0008340               | determination of adult lifespan                                                        | Biological process | 20            | 160      | 8.54000E-07  | 4.33853    |  |
| GO:0048813               | dendrite morphogenesis                                                                 | Biological process | 20            | 197      | 2.03000E-05  | 3.52368    |  |
| GO:0001666               | response to hypoxia                                                                    | Biological process | 13            | 41       | 3.21000E-09  | 11.00500   |  |
| GO:0015992               | proton transport                                                                       | Biological process | 12            | 40       | 3.01000E-08  | 10.41250   |  |
| GO:0006457               | protein folding                                                                        | Biological process | 12            | 140      | 6.45273E-03  | 2.97499    |  |
| GO:0006120               | mitochondrial electron transport, NADH to ubiquinone                                   | Biological process | 11            | 34       | 6.07000E-08  | 11.22910   |  |
| GO:0006123               | mitochondrial electron transport, cytochrome c to oxygen                               | Biological process | 9             | 17       | 1.09000E-08  | 18.37490   |  |
| GO:0016339               | calcium-dependent cell-cell adhesion                                                   | Biological process | 9             | 43       | 6.61000E-05  | 7.26451    |  |
| GO:0042067               | establishment of ommatidial planar polarity                                            | Biological process | 8             | 45       | 5.74748E-04  | 6.17035    |  |
| GO:0001736               | establishment of planar polarity                                                       | Biological process | 8             | 55       | 2.01248E-03  | 5.04847    |  |
| GO:0015986               | ATP synthesis coupled proton transport                                                 | Biological process | 7             | 25       | 1.08471E-04  | 9.71830    |  |
| GO:0016458               | gene silencing                                                                         | Biological process | 7             | 32       | 4.62982E-04  | 7.59242    |  |
| GO:0008587               | imaginal disc-derived wing margin morphogenesis                                        | Biological process | 7             | 38       | 1.27531E-03  | 6.39362    |  |
| GO:0016203               | muscle attachment                                                                      | Biological process | 7             | 40       | 1.69778E-03  | 6.07394    |  |
| GO:0007156               | homophilic cell adhesion                                                               | Biological process | 7             | 46       | 3.60910E-03  | 5.28169    |  |
| GO:0006122               | mitochondrial electron transport, ubiquinol to cytochrome c                            | Biological process | 6             | 13       | 2.02000E-05  | 16.01920   |  |
| GO:0001737               | establishment of imaginal disc-derived wing hair orientation                           | Biological process | 6             | 37       | 6.45273E-03  | 5.62836    |  |
| GO:0006464               | protein modification process                                                           | Biological process | 6             | 37       | 6.45273E-03  | 5.62836    |  |
| GO:0006417               | regulation of translation                                                              | Biological process | 5             | 17       | 1.31501E-03  | 10.20830   |  |
| GO:0007016               | cytoskeletal anchoring at plasma membrane                                              | Biological process | 5             | 20       | 2.72343E-03  | 8.67706    |  |
| GO:0042066               | perineurial glial growth                                                               | Biological process | 4             | 11       | 2.59640E-03  | 12.62120   |  |
| GO:0043524               | negative regulation of neuron apoptosis                                                | Biological process | 4             | 12       | 3.57898E-03  | 11.56940   |  |
| GO:0007519               | skeletal muscle tissue development                                                     | Biological process | 4             | 15       | 8.06719E-03  | 9.25553    |  |
| GO:0046331               | lateral inhibition                                                                     | Biological process | 4             | 16       | 9.03428E-03  | 8.67706    |  |
| GO:0003735               | structural constituent of ribosome                                                     | Molecular function | 136           | 326      | 8.78000E-126 | 14.47950   |  |
| GO:0008553               | hydrogen-exporting ATPase activity, phosphorylative mechanism                          | Molecular function | 32            | 113      | 2.81000E-21  | 9.82888    |  |
| GO:0003779               | actin binding                                                                          | Molecular function | 26            | 202      | 6.02000E-09  | 4.46739    |  |
| GO:0005214               | structural constituent of chitin-based cuticle                                         | Molecular function | 21            | 256      | 2.56151E-04  | 2.84716    |  |
| GO:0004129               | cytochrome-c oxidase activity                                                          | Molecular function | 18            | 42       | 2.05000E-15  | 14.87500   |  |
| GO:0004364               | glutathione transferase activity                                                       | Molecular function | 14            | 66       | 1.46000E-07  | 7.36235    |  |
| GO:0005200               | structural constituent of cytoskeleton                                                 | Molecular function | 14            | 67       | 1.67000E-07  | 7.25246    |  |
| GO:0003954               | NADH dehydrogenase activity                                                            | Molecular function | 11            | 37       | 1.48000E-07  | 10.31870   |  |
| GO:0008121               | ubiquinol-cytochrome-c reductase activity                                              | Molecular function | 10            | 18       | 6.75000E-10  | 19.28230   |  |
| GO:0008137               | NADH dehydrogenase (ubiquinone) activity                                               | Molecular function | 9             | 52       | 2.89676E-04  | 6.00719    |  |
| GO:0008010               | structural constituent of chitin-based larval cuticle                                  | Molecular function | 9             | 61       | 8.08884E-04  | 5.12089    |  |
| GO:0042623               | ATPase activity, coupled                                                               | Molecular function | 9             | 87       | 8.10495E-03  | 3.59051    |  |
| GO:0008017               | microtubule binding                                                                    | Molecular function | 9             | 88       | 8.18785E-03  | 3.54970    |  |
| GO:0004550               | nucleoside diphosphate kinase activity                                                 | Molecular function | 8             | 12       | 9.23000E-09  | 23.13880   |  |
| GO:0003713               | transcription coactivator activity                                                     | Molecular function | 8             | 44       | 4.95016E-04  | 6.31059    |  |
| GO:0003899               | DNA-directed RNA polymerase activity                                                   | Molecular function | 8             | 65       | 5.60861E-03  | 4.27178    |  |
| GO:0003993               | acid phosphatase activity                                                              | Molecular function | 4             | 15       | 8.06719E-03  | 9.25553    |  |
| GO:0005811               | lipid particle                                                                         | Cellular component | 75            | 339      | 1.69000E-43  | 7.67881    |  |
| GO:0005875               | microtubule associated complex                                                         | Cellular component | 48            | 359      | 2.31000E-17  | 4.64065    |  |
| GO:0022625               | cytosolic large ribosomal subunit                                                      | Cellular component | 47            | 79       | 4.15000E-50  | 20.64920   |  |
| GO:0005737               | cytoplasm                                                                              | Cellular component | 43            | 859      | 1.96990E-03  | 1.73743    |  |
| GO:0022627               | cytosolic small ribosomal subunit                                                      | Cellular component | 40            | 63       | 3.83000E-44  | 22.03700   |  |
| GO:0005840               | ribosome                                                                               | Cellular component | 30            | 65       | 3.22000E-27  | 16.01920   |  |
| GO:0005739               | mitochondrion                                                                          | Cellular component | 23            | 333      | 1.03516E-03  | 2.39726    |  |
| GO:0016021               | integral to membrane                                                                   | Cellular component | 21            | 1302     | 8.18785E-03  | 0.55981    |  |
| GO:0005747               | mitochondrial respiratory chain complex I                                              | Cellular component | 19            | 71       | 4.99000E-12  | 9.28812    |  |
| GO:0030532               | small nuclear ribonucleoprotein complex                                                | Cellular component | 15            | 104      | 6.75000E-06  | 5.00599    |  |
| GO:0005762               | mitochondrial large ribosomal subunit                                                  | Cellular component | 14            | 66       | 1.46000E-07  | 7.36235    |  |
| GO:0005751               | mitochondrial respiratory chain complex IV                                             | Cellular component | 13            | 24       | 1.08000E-12  | 18.80030   |  |
| GO:0005750               | mitochondrial respiratory chain complex III                                            | Cellular component | 11            | 20       | 7.80000E-11  | 19.08950   |  |
| GO:0005681               | spliceosomal complex                                                                   | Cellular component | 11            | 107      | 2.72980E-03  | 3.56814    |  |
| GO:0030018               | Z disc                                                                                 | Cellular component | 9             | 24       | 3.64000E-07  | 13.01560   |  |
| GO:0000276               | mitochondrial proton-transporting ATP synthase complex, coupling factor F <sub>0</sub> | Cellular component | 7             | 17       | 6.75000E-06  | 14.29160   |  |
| GO:0016589               | NURF complex                                                                           | Cellular component | 6             | 21       | 4.01453E-04  | 9.91664    |  |
| GO:0005884               | actin filament                                                                         | Cellular component | 6             | 29       | 1.96990E-03  | 7.18101    |  |
| GO:0005665               | DNA-directed RNA polymerase II, core complex                                           | Cellular component | 6             | 34       | 4.32027E-03  | 6.12498    |  |
| GO:0000221               | vacuolar proton-transporting V-type ATPase, V1 domain                                  | Cellular component | 6             | 36       | 5.75482E-03  | 5.78470    |  |
| GO:0016585               | chromatin remodeling complex                                                           | Cellular component | 4             | 9        | 1.18597E-03  | 15.42590   |  |