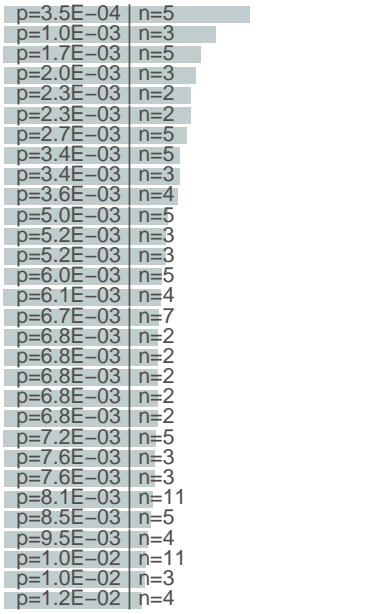


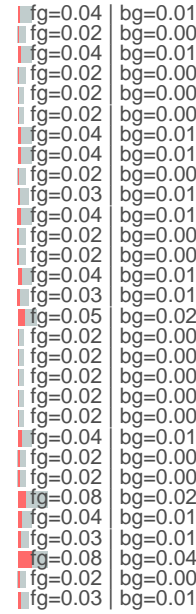
GO:BP  
Ncol\_Nvec\_v1g241767

fraction genes in fg and expected value

|  |            |
|--|------------|
| tRNA aminoacylation for protein translat...  | GO:0006418 |
| plasma membrane to endosome transport        | GO:0048227 |
| mitochondrion localization                   | GO:0051646 |
| histone H4–K16 acetylation                   | GO:0043984 |
| positive regulation of T cell mediated c...  | GO:0001916 |
| response to manganese–induced endoplasmic... | GO:1990737 |
| DNA synthesis involved in DNA repair         | GO:0000731 |
| protein monoubiquitination                   | GO:0006513 |
| regulation of translational initiation i...  | GO:0043558 |
| regulation of hematopoietic stem cell di...  | GO:1902036 |
| protein autoubiquitination                   | GO:0051865 |
| mannosylation                                | GO:0097502 |
| PERK–mediated unfolded protein response      | GO:0036499 |
| regulation of viral life cycle               | GO:1903900 |
| regulation of dendritic spine developmen...  | GO:0060998 |
| vesicle–mediated transport to the plasma...  | GO:0098876 |
| protein localization to nucleolus            | GO:1902570 |
| regulation of IRE1–mediated unfolded pro...  | GO:1903894 |
| L–serine transport                           | GO:0015825 |
| aminoacyl–tRNA metabolism involved in tr...  | GO:0106074 |
| negative regulation of translational ini...  | GO:0032057 |
| regulation of neurotransmitter secretion     | GO:0046928 |
| regulation of hemocyte proliferation         | GO:0035206 |
| histone H2A ubiquitination                   | GO:0033522 |
| response to topologically incorrect prot...  | GO:0035966 |
| neuron remodeling                            | GO:0016322 |
| base–excision repair                         | GO:0006284 |
| multicellular organism aging                 | GO:0010259 |
| endosome transport via multivesicular bo...  | GO:0032509 |
| regulation of viral genome replication       | GO:0045069 |



–log(p)  
n=131/394 input genes with annotations

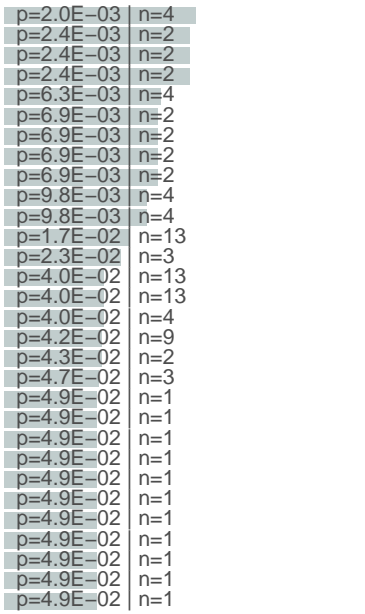


fraction

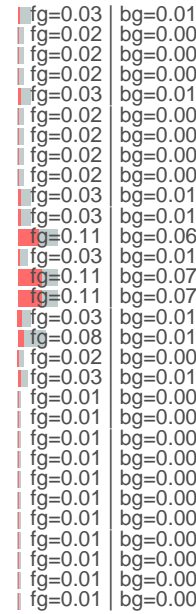
GO:MF  
Ncol\_Nvec\_v1g241767

fraction genes in fg and expected value

|   |            |
|---|------------|
| aminoacyl–tRNA ligase activity              | GO:0004812 |
| translation release factor activity         | GO:0003747 |
| glycolipid mannosyltransferase activity     | GO:0004376 |
| four–way junction DNA binding               | GO:0000400 |
| translation initiation factor activity      | GO:0003743 |
| cAMP response element binding               | GO:0035497 |
| L–serine transmembrane transporter activ... | GO:0015194 |
| aminoacyl–tRNA editing activity             | GO:0002161 |
| G–quadruplex DNA binding                    | GO:0051880 |
| ubiquitin binding                           | GO:0043130 |
| acetyltransferase activity                  | GO:0016407 |
| purine ribonucleoside triphosphate bindi... | GO:0035639 |
| GDP binding                                 | GO:0019003 |
| ribonucleotide binding                      | GO:0032553 |
| purine ribonucleotide binding               | GO:0032555 |
| UDP–glycosyltransferase activity            | GO:0008194 |
| translation regulator activity              | GO:0045182 |
| sulfur amino acid transmembrane transpor... | GO:0000099 |
| damaged DNA binding                         | GO:0003684 |
| 3'–flap–structured DNA binding              | GO:0070337 |
| macrophage migration inhibitory factor b... | GO:0035718 |
| phosphatidylserine decarboxylase activit... | GO:0004609 |
| branched–chain amino acid transmembrane ... | GO:0015658 |
| importin–alpha family protein binding       | GO:0061676 |
| phospholipase D activator activity          | GO:1990583 |
| ubiquitin–like protein–specific endopept... | GO:0070137 |
| SUMO–specific endopeptidase activity        | GO:0070139 |
| MHC protein complex binding                 | GO:0023023 |
| glutamate–5–semialdehyde dehydrogenase a... | GO:0004350 |
| MHC class Ib protein complex binding        | GO:0023025 |



–log(p)  
n=116/394 input genes with annotations

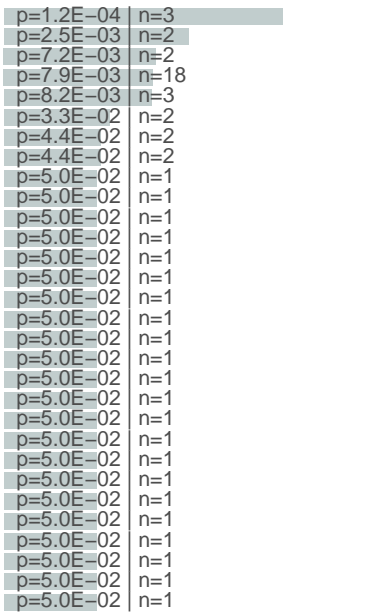


fraction

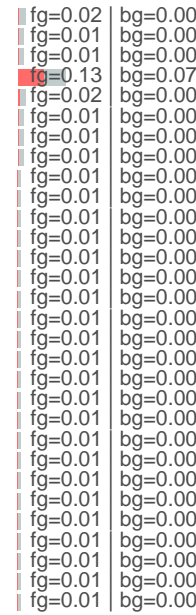
GO:CC  
Ncol\_Nvec\_v1g241767

fraction genes in fg and expected value

|   |            |
|---|------------|
| multi–eIF complex                           | GO:0043614 |
| translation preinitiation complex           | GO:0070993 |
| eukaryotic translation initiation factor... | GO:0005850 |
| endoplasmic reticulum membrane              | GO:0005789 |
| mitochondrial nucleoid                      | GO:0042645 |
| eukaryotic translation initiation factor... | GO:0005852 |
| male germ cell nucleus                      | GO:0001673 |
| aminoacyl–tRNA synthetase multienzyme co... | GO:0017101 |
| translation release factor complex          | GO:0018444 |
| anchored component of synaptic vesicle m... | GO:0098993 |
| core–binding factor complex                 | GO:0016513 |
| eukaryotic 43S preinitiation complex        | GO:0016282 |
| DNA topoisomerase type II (double strand... | GO:0009330 |
| endocytic vesicle lumen                     | GO:0071682 |
| RNA nuclear export complex                  | GO:0042565 |
| Holliday junction resolvase complex         | GO:0048476 |
| eukaryotic 48S preinitiation complex        | GO:0033290 |
| astrocyte end–foot                          | GO:0097450 |
| glial limiting end–foot                     | GO:0097451 |
| gamma DNA polymerase complex                | GO:0005760 |
| longitudinal sarcoplasmic reticulum         | GO:0014801 |
| ribbon synapse                              | GO:0097470 |
| nuclear RNA export factor complex           | GO:0042272 |
| methionyl glutamyl tRNA synthetase compl... | GO:0017102 |
| platelet dense tubular network              | GO:0031094 |
| platelet dense tubular network membrane     | GO:0031095 |
| cation–transporting ATPase complex          | GO:0090533 |
| calcium ion–transporting ATPase complex     | GO:0090534 |
| synaptic cleft                              | GO:0043083 |
| endodeoxyribonuclease complex               | GO:1905347 |



–log(p)  
n=135/394 input genes with annotations



fraction