

EASE RESULTS

| <i>System</i> | <i>Category</i> | <i>LH</i> | <i>LT</i> | <i>PH</i> | <i>PT</i> | <i>EASE Score</i> | <i>Fisher Exact</i> |
|--------------------|---|-----------|-----------|-----------|-----------|-------------------|---------------------|
| cellular_component | cytoplasm | 40 | 44 | 2145 | 7038 | 1.74E-16 | 5.75E-17 |
| molecular_function | structural molecule activity | 23 | 49 | 440 | 8126 | 5.73E-16 | 6.31E-17 |
| cellular_component | cytosolic ribosome (sensu Eukarya) | 10 | 44 | 32 | 7038 | 1.23E-13 | 1.76E-15 |
| biological_process | muscle development | 13 | 46 | 101 | 7825 | 2.21E-13 | 8.71E-15 |
| cellular_component | muscle fiber | 10 | 44 | 35 | 7038 | 3.06E-13 | 4.94E-15 |
| biological_process | muscle contraction | 12 | 46 | 106 | 7825 | 1.15E-11 | 5.37E-13 |
| cellular_component | ribosome | 12 | 44 | 103 | 7038 | 1.49E-11 | 7.18E-13 |
| molecular_function | structural constituent of ribosome | 12 | 49 | 110 | 8126 | 2.5E-11 | 1.25E-12 |
| biological_process | protein biosynthesis | 16 | 46 | 348 | 7825 | 3.99E-10 | 4.88E-11 |
| molecular_function | structural constituent of muscle | 8 | 49 | 32 | 8126 | 4.79E-10 | 9.06E-12 |
| biological_process | cell motility | 14 | 46 | 242 | 7825 | 5.2E-10 | 5.01E-11 |
| cellular_component | cytosol | 13 | 44 | 200 | 7038 | 1.41E-09 | 1.28E-10 |
| biological_process | striated muscle contraction | 7 | 46 | 28 | 7825 | 8.78E-09 | 1.63E-10 |
| cellular_component | myofibril | 7 | 44 | 27 | 7038 | 9.74E-09 | 1.83E-10 |
| cellular_component | sarcomere | 7 | 44 | 27 | 7038 | 9.74E-09 | 1.83E-10 |
| cellular_component | ribonucleoprotein complex | 12 | 44 | 192 | 7038 | 1.26E-08 | 1.18E-09 |
| cellular_component | actin cytoskeleton | 10 | 44 | 153 | 7038 | 0.000000257 | 2.31E-08 |
| biological_process | macromolecule biosynthesis | 16 | 46 | 570 | 7825 | 0.000000318 | 6.46E-08 |
| cellular_component | cytosolic small ribosomal subunit (sensu Eukarya) | 5 | 44 | 13 | 7038 | 0.00000083 | 9.37E-09 |
| cellular_component | eukaryotic 48S initiation complex | 5 | 44 | 13 | 7038 | 0.00000083 | 9.37E-09 |
| biological_process | biosynthesis | 16 | 46 | 678 | 7825 | 0.00000292 | 0.000000707 |
| cellular_component | intracellular | 40 | 44 | 4121 | 7038 | 0.00000343 | 0.00000219 |
| molecular_function | RNA binding | 12 | 49 | 344 | 8126 | 0.00000368 | 0.000000613 |
| cellular_component | cytosolic large ribosomal subunit (sensu Eukarya) | 5 | 44 | 19 | 7038 | 0.00000438 | 8.24E-08 |
| cellular_component | eukaryotic 43S preinitiation complex | 5 | 44 | 24 | 7038 | 0.0000117 | 0.000000294 |
| cellular_component | large ribosomal subunit | 5 | 44 | 26 | 7038 | 0.0000164 | 0.000000451 |
| cellular_component | small ribosomal subunit | 5 | 44 | 26 | 7038 | 0.0000164 | 0.000000451 |
| cellular_component | striated muscle thin filament | 4 | 44 | 9 | 7038 | 0.0000174 | 0.000000164 |
| cellular_component | muscle myosin | 4 | 44 | 15 | 7038 | 0.0000919 | 0.00000173 |
| biological_process | regulation of muscle contraction | 4 | 46 | 16 | 7825 | 0.0000945 | 0.00000181 |
| biological_process | organogenesis | 14 | 46 | 696 | 7825 | 0.0000973 | 0.0000276 |
| cellular_component | myosin II | 4 | 44 | 17 | 7038 | 0.000136 | 0.00000298 |
| cellular_component | cytoskeleton | 11 | 44 | 435 | 7038 | 0.000222 | 0.0000528 |
| biological_process | morphogenesis | 14 | 46 | 797 | 7825 | 0.00038 | 0.000123 |
| cellular_component | smooth endoplasmic reticulum | 3 | 44 | 6 | 7038 | 0.000539 | 0.0000045 |
| cellular_component | hemoglobin complex | 3 | 44 | 7 | 7038 | 0.000751 | 0.00000784 |
| molecular_function | cytoskeletal protein binding | 7 | 49 | 187 | 8126 | 0.000753 | 0.000116 |
| molecular_function | actin binding | 6 | 49 | 146 | 8126 | 0.00161 | 0.000225 |
| cellular_component | myosin | 4 | 44 | 40 | 7038 | 0.00179 | 0.000103 |
| biological_process | protein metabolism | 19 | 46 | 1635 | 7825 | 0.00268 | 0.00131 |
| biological_process | translational elongation | 3 | 46 | 15 | 7825 | 0.00324 | 0.0000823 |
| biological_process | translation | 5 | 46 | 111 | 7825 | 0.00365 | 0.000453 |
| biological_process | development | 14 | 46 | 1270 | 7825 | 0.0231 | 0.0118 |
| molecular_function | translation factor activity, nucleic acid binding | 3 | 49 | 68 | 8126 | 0.0608 | 0.00785 |
| molecular_function | translation regulator activity | 3 | 49 | 69 | 8126 | 0.0624 | 0.00817 |
| molecular_function | structural constituent of cytoskeleton | 3 | 49 | 75 | 8126 | 0.0722 | 0.0103 |
| molecular_function | calcium ion binding | 6 | 49 | 384 | 8126 | 0.0747 | 0.0269 |
| cellular_component | cell | 42 | 44 | 6178 | 7038 | 0.0895 | 0.0816 |
| molecular_function | nucleic acid binding | 16 | 49 | 1830 | 8126 | 0.103 | 0.067 |
| molecular_function | motor activity | 3 | 49 | 94 | 8126 | 0.106 | 0.0188 |
| biological_process | physiological process | 42 | 46 | 6633 | 7825 | 0.163 | 0.15 |
| biological_process | cellular physiological process | 21 | 46 | 2909 | 7825 | 0.195 | 0.149 |
| molecular_function | binding | 32 | 49 | 4944 | 8126 | 0.354 | 0.313 |
| molecular_function | metal ion binding | 7 | 49 | 826 | 8126 | 0.361 | 0.226 |
| molecular_function | molecular_function unknown | 5 | 49 | 543 | 8126 | 0.401 | 0.228 |
| molecular_function | protein binding | 10 | 49 | 1375 | 8126 | 0.426 | 0.311 |
| biological_process | biological_process unknown | 4 | 46 | 500 | 7825 | 0.556 | 0.339 |

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|--------------------|----------------------------------|--------------------|----|------|------|-------|-------|
| cellular_component | endoplasmic reticulum | 3 | 44 | 302 | 7038 | 0.557 | 0.292 |
| cellular_component | cellular_component unknown | 4 | 44 | 532 | 7038 | 0.641 | 0.428 |
| molecular_function | enzyme regulator activity | 3 | 49 | 380 | 8126 | 0.664 | 0.404 |
| biological_process | metabolism | 25 | 46 | 4356 | 7825 | 0.681 | 0.631 |
| molecular_function | purine nucleotide binding | 4 | 49 | 1009 | 8126 | 0.948 | 0.874 |
| molecular_function | nucleotide binding | 4 | 49 | 1022 | 8126 | 0.951 | 0.88 |
| biological_process | cellular process | 21 | 46 | 4393 | 7825 | 0.958 | 0.943 |
| molecular_function | ATP binding | 3 | 49 | 811 | 8126 | 0.96 | 0.88 |
| molecular_function | adenyl nucleotide binding | 3 | 49 | 819 | 8126 | 0.961 | 0.884 |
| molecular_function | transporter activity | 4 | 49 | 1098 | 8126 | 0.966 | 0.913 |
| biological_process | transport | 4 | 46 | 1198 | 7825 | 0.977 | 0.937 |
| biological_process | response to stimulus | 4 | 46 | 1230 | 7825 | 0.98 | 0.945 |
| molecular_function | hydrolase activity | 4 | 49 | 1256 | 8126 | 0.985 | 0.957 |
| biological_process | response to external stimulus | 3 | 46 | 1033 | 7825 | 0.987 | 0.953 |
| biological_process | organismal physiological process | 3 | 46 | 1211 | 7825 | 0.995 | 0.981 |
| biological_process | cell growth and/or maintenance | 8 | 46 | 2478 | 7825 | 0.996 | 0.991 |
| molecular_function | catalytic activity | 9 | 49 | 2935 | 8126 | 0.999 | 0.998 |
| cellular_component | integral to membrane | 3 | 44 | 2126 | 7038 | 1 | 1 |
| cellular_component | nucleus | 3 | 44 | 2079 | 7038 | 1 | 1 |
| cellular_component | membrane | 6 | 44 | 2745 | 7038 | 1 | 1 |