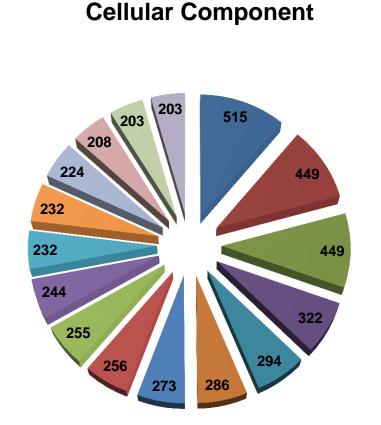
# **Supplemental Figure 1A**

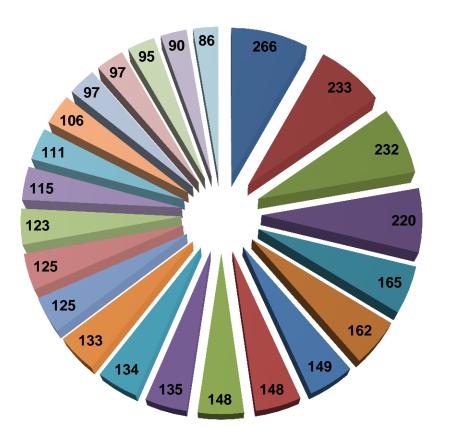


**Supplemental Figure 1.** Gene ontology analysis of mouse retina proteome. (A) Cellular component; (B) Biological process; (C) Molecular function.

#### mitochondrion

- intracellular non-membranebounded organelle
- non-membrane-bounded organelle
- plasma membrane part
- organelle membrane
- cytoskeleton
- membrane-enclosed lumen
- organelle lumen
- intracellular organelle lumen
- mitochondrial part
- organelle envelope
- envelope
- cytosol
- ribonucleoprotein complex
- endoplasmic reticulum
- cytoskeletal part

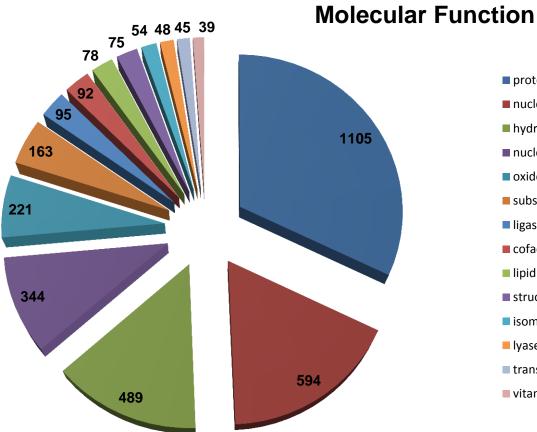
### **Supplemental Figure 1B**



# **Biological Process**

- protein localization
- establishment of protein localization
- protein transport
- oxidation reduction
- intracellular transport
- vesicle-mediated transport
- translation
- RNA processing
- generation of precursor metabolites and energy
- homeostatic process
- macromolecule catabolic process
- mRNA metabolic process
- cellular protein localization
- cellular macromolecule localization
- mRNA processing
- intracellular protein transport
- nitrogen compound biosynthetic process
- RNA splicing
- macromolecular complex subunit organization
- cytoskeleton organization
- cellular homeostasis
- macromolecular complex assembly
- membrane organization

# **Supplemental Figure 1C**

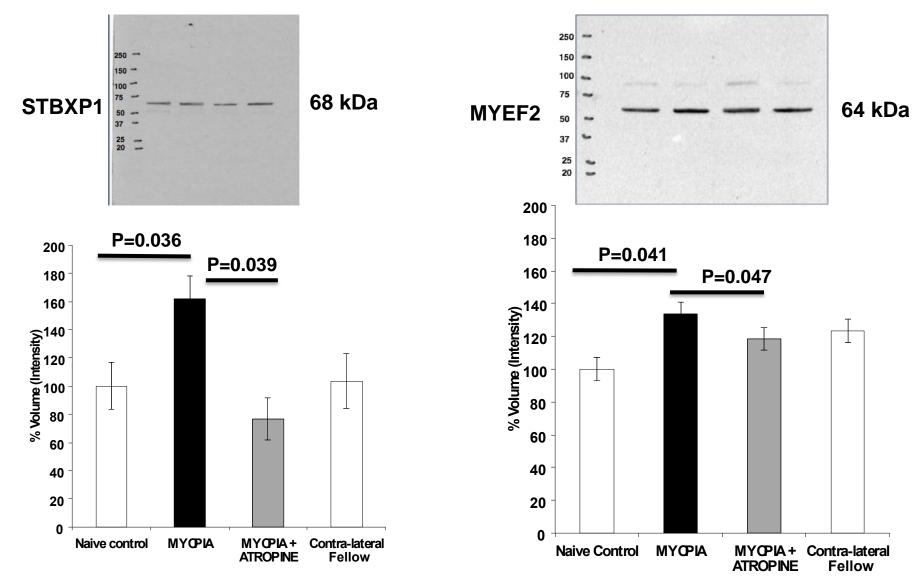


- protein binding
- nucleotide binding
- hydrolase activity
- nucleoside binding
- oxidoreductase activity
- substrate-specific transporter activity
- ligase activity
- cofactor binding
- lipid binding
- structural constituent of ribosome
- isomerase activity
- Iyase activity

translation factor activity, nucleic acid binding

vitamin binding

## **Supplemental Figure 2**



**Supplemental Figure 2.** In addition to GAT-1, data from quantitative proteomic results for top 2 proteins were also validated by Western blot analysis. The retinal levels of; Myelin Expression Factor2 (MEF2) and Isoform 1 of Syntaxin-binding protein 1 (STXBP1) in lens-induced myopic, contra-lateral fellow, atropine treated and naïve control eyes. Western blot analysis showed a pattern of protein expression similar to that of proteomics analysis. Data represent the mean±SD; Significance level P≤0.05.