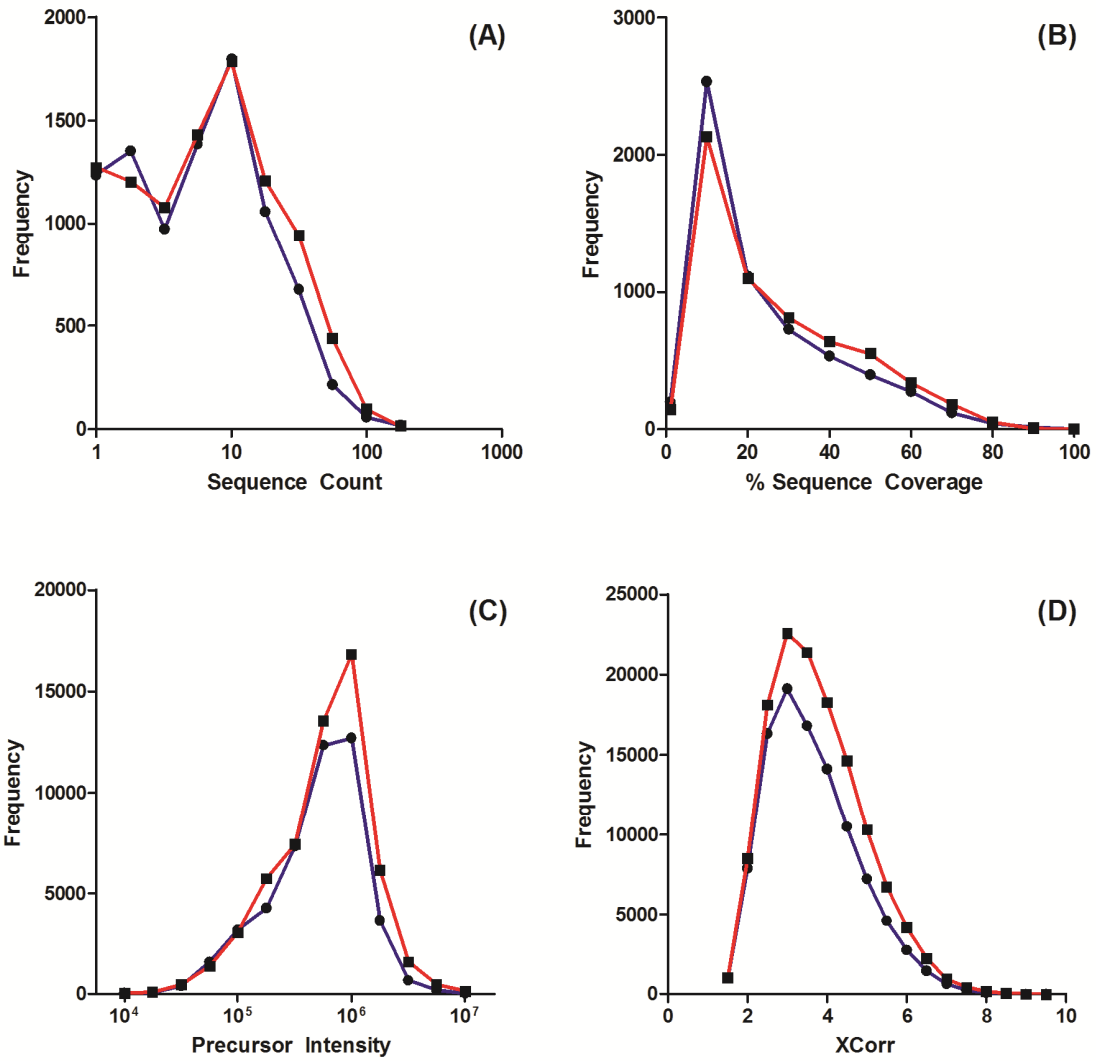
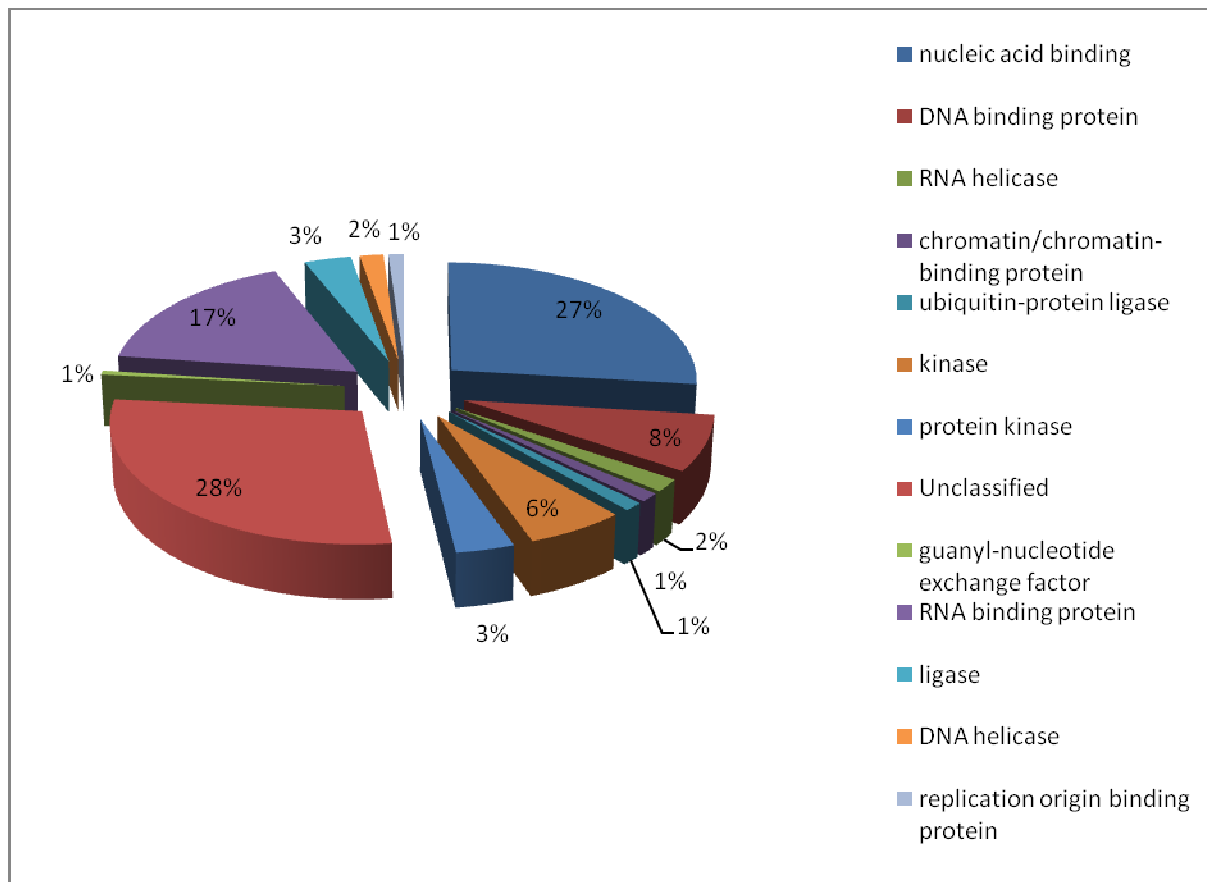


Supplemental Material

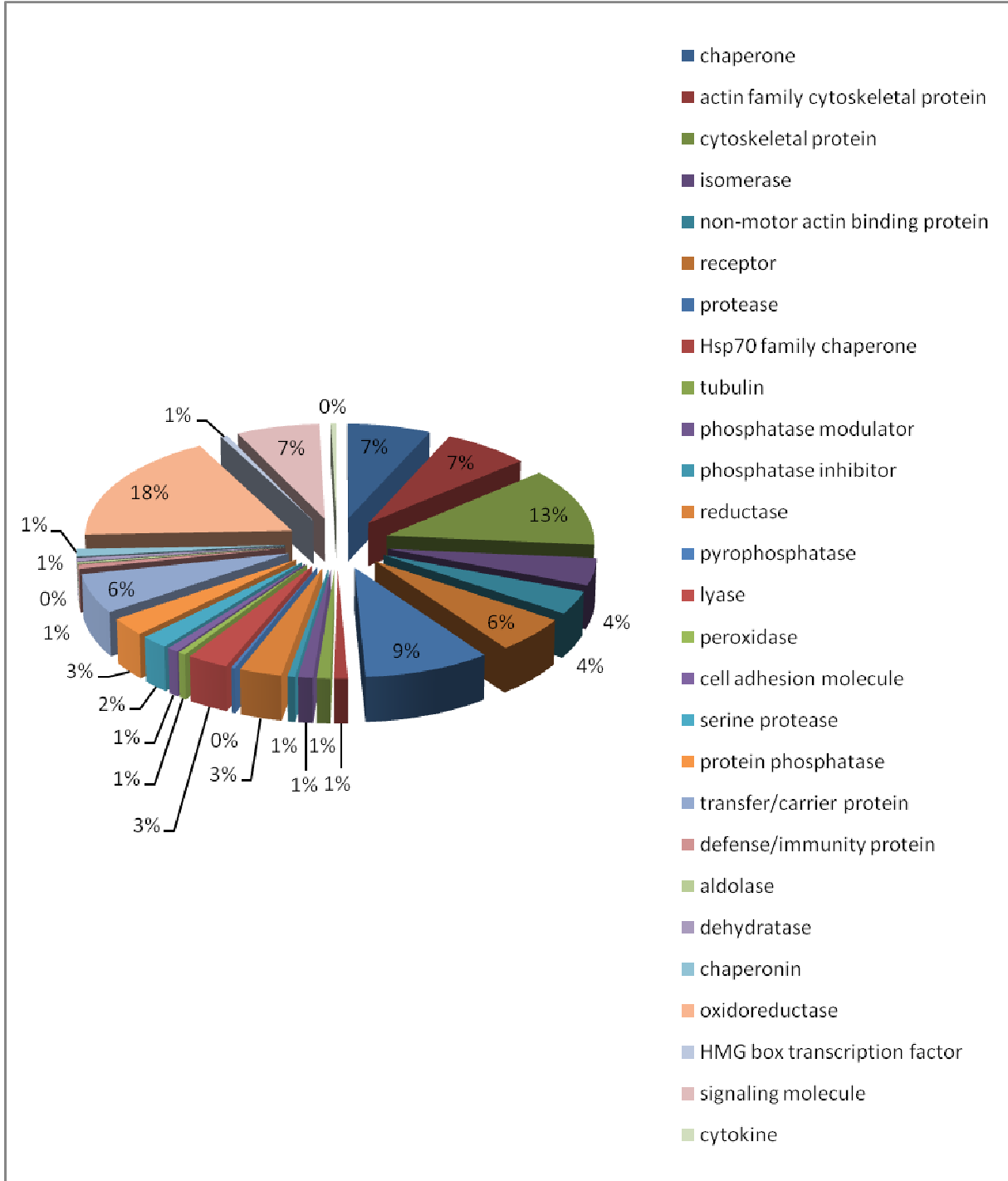
Supplemental Figure 1: Distributions of the protein and peptide metrics (A) protein sequence count, (B) protein sequence coverage, (C) peptide precursor intensity, and (D) peptide XCorr.



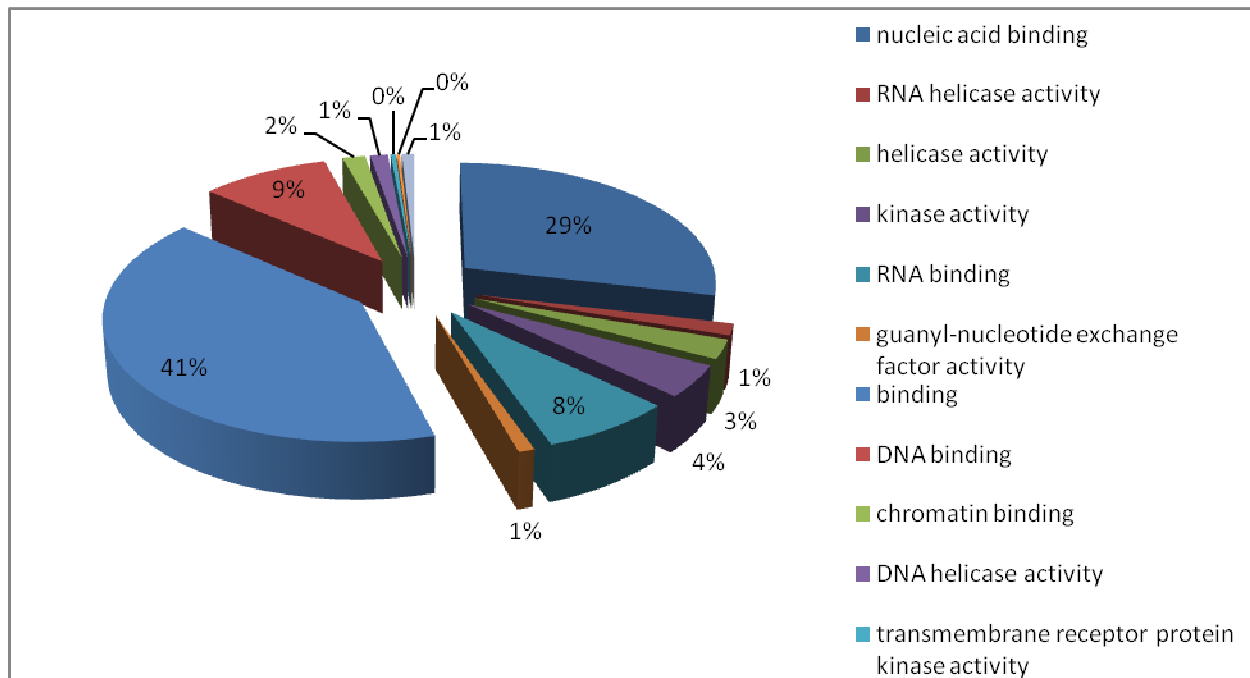
Supplemental Figure 2: PANTHER Protein Classes enriched at least 2-fold with ProteoMiner and $p \leq 0.05$.



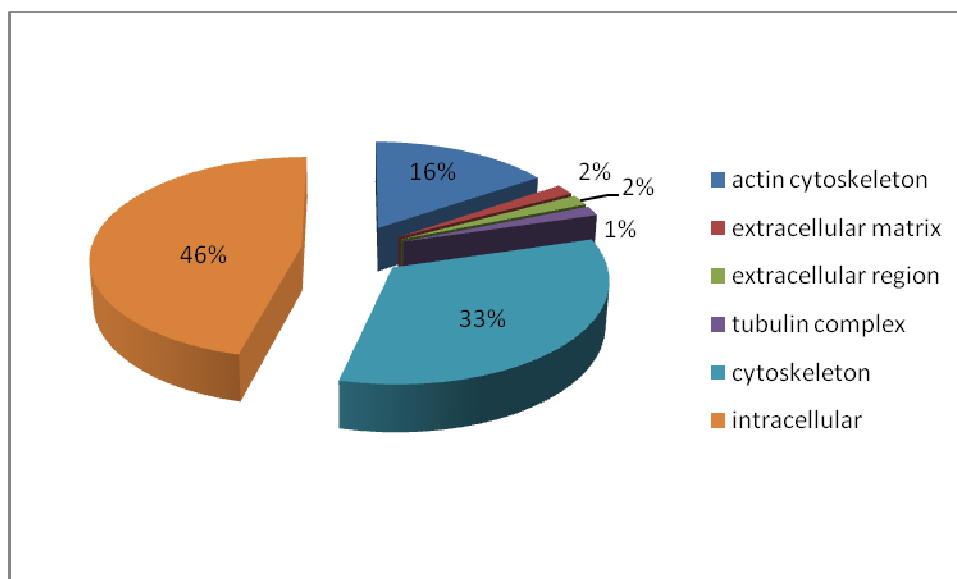
Supplemental Figure 3: PANTHER Protein Classes depleted at least 2-fold with ProteoMiner and $p \leq 0.05$.



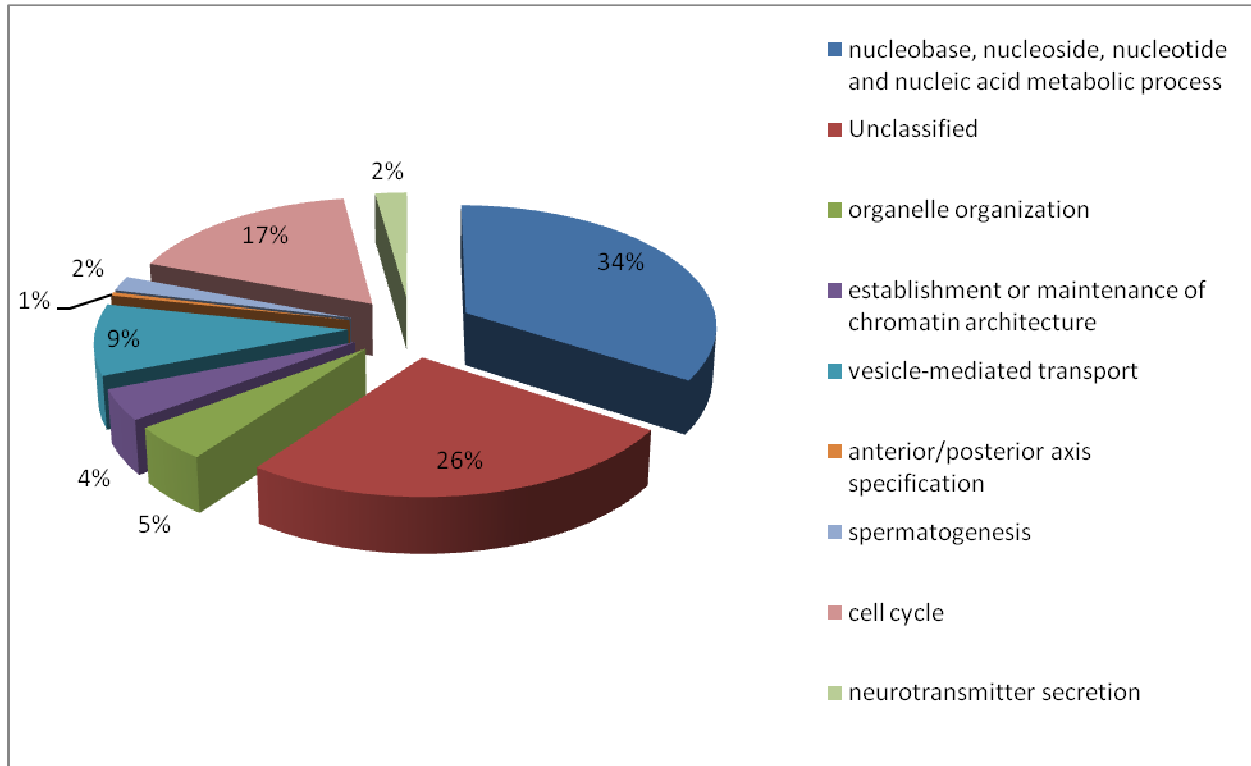
Supplemental Figure 4: Gene Ontology Molecular Function enriched at least 2-fold with ProteoMiner and $p \leq 0.05$.



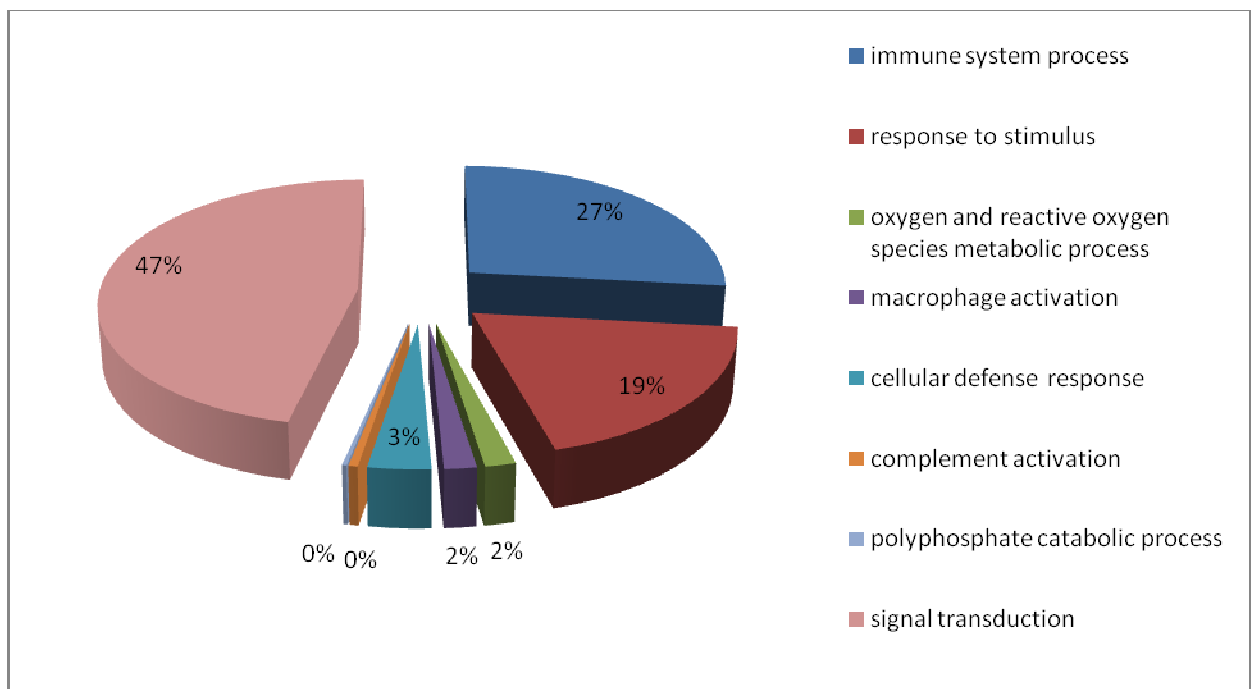
Supplemental Figure 5: Gene Ontology Cellular Component depleted at least 2-fold with ProteoMiner and $p \leq 0.05$.



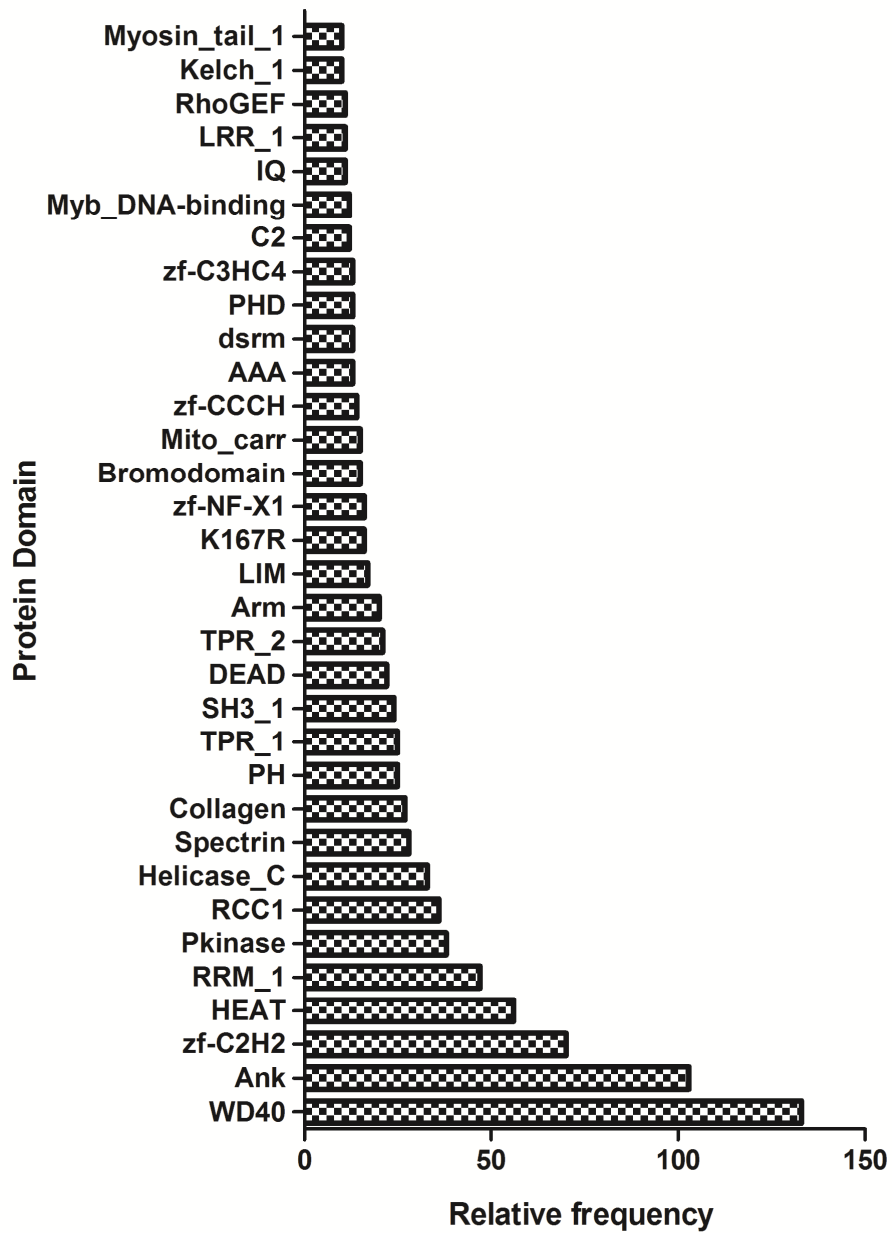
Supplemental Figure 6: Gene Ontology Biological Processes enriched at least 2-fold with ProteoMiner and $p \leq 0.05$.



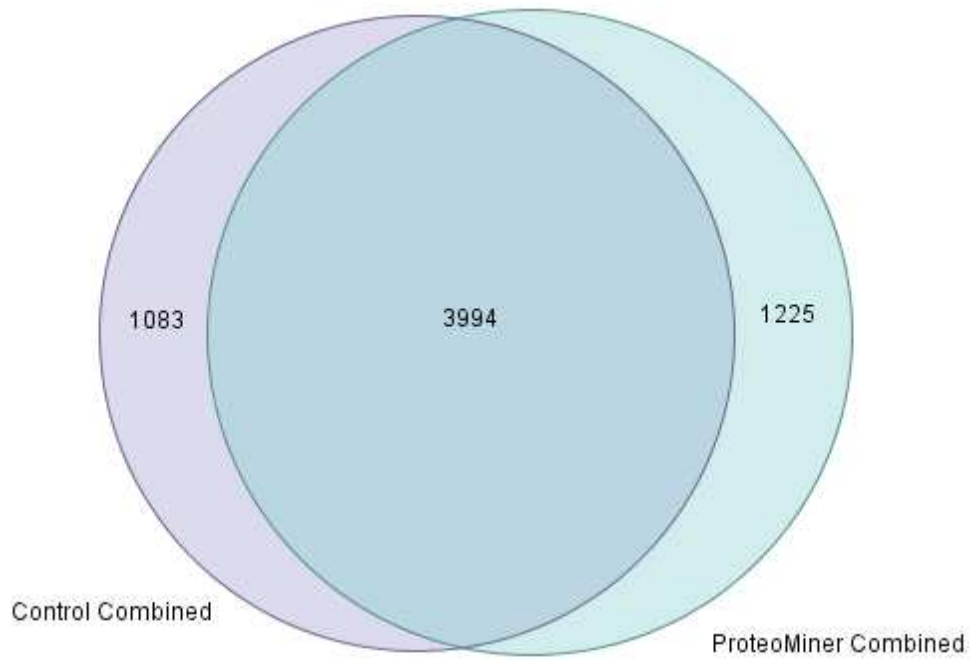
Supplemental Figure 7: Gene Ontology Biological Processes depleted at least 2-fold with ProteoMiner and $p \leq 0.05$.



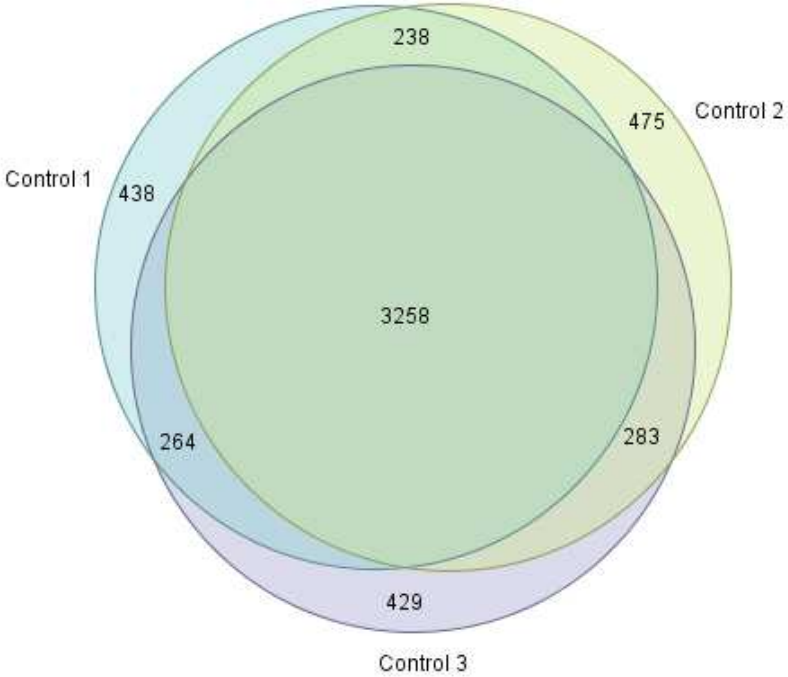
Supplemental Figure 8: Relative frequency of protein domains within proteins enriched at least two-fold based on spectral counts and found in at least 10 proteins.

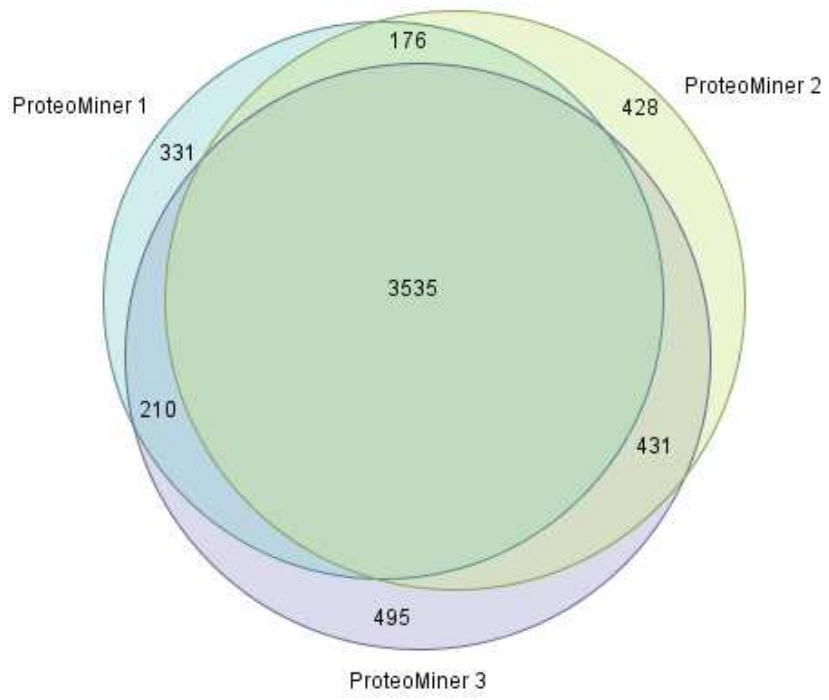


Supplemental Figure 9: Venn diagram of all proteins identified between Control and ProteoMiner runs



Supplemental Figure 10: Comparison of Venn diagrams between triplicate Control and ProteoMiner runs





Supplemental Table 1: List of Gene Ontology Biological Processes unchanged (-2 to 2-fold change) by ProteoMiner or with $p > 0.05$.

vitamin biosynthetic process

response to stress

nucleobase, nucleoside, nucleotide and nucleic acid transport

gamete generation

cell adhesion

cellular amino acid and derivative metabolic process

reproduction

exocytosis

neurological system process

apoptosis

immune response

coenzyme metabolic process

defense response to bacterium

vitamin catabolic process

vitamin metabolic process

cell communication

pattern specification process

antigen processing and presentation of peptide or polysaccharide antigen via MHC class II

natural killer cell activation

blood circulation

response to interferon-gamma

endocytosis

antigen processing and presentation
carbohydrate metabolic process
protein metabolic process
transport
heart development
lysosomal transport
endoderm development
meiosis
chromosome segregation
carbohydrate transport
cellular component morphogenesis
anatomical structure morphogenesis
system development
tricarboxylic acid cycle
protein transport
intracellular protein transport
nervous system development
mitosis
skeletal system development
sulfur metabolic process
amino acid transport
generation of precursor metabolites and energy
porphyrin metabolic process
fertilization
cell motion

anion transport
response to toxin
cell-cell adhesion
cellular component organization
sensory perception of sound
muscle contraction
peroxisomal transport
regulation of liquid surface tension
regulation of phosphate metabolic process
response to external stimulus
blood coagulation
system process
vitamin transport
cation transport
metabolic process
cell-matrix adhesion
embryonic development
mitochondrion organization
muscle organ development
sex determination
asymmetric protein localization
protein localization
cell-cell signaling
ectoderm development
negative regulation of apoptosis

induction of apoptosis
phosphate metabolic process
mesoderm development
regulation of biological process
regulation of vasoconstriction
oxidative phosphorylation
cell surface receptor linked signal transduction
phosphate transport
sensory perception
respiratory electron transport chain
cellular glucose homeostasis
response to pheromone
cellular calcium ion homeostasis
B cell mediated immunity
nuclear transport
lipid metabolic process
intracellular signaling cascade
lipid transport
developmental process
mammary gland development
nitrogen compound metabolic process
extracellular transport
ferredoxin metabolic process
segment specification
nitric oxide biosynthetic process

hemopoiesis
homeostatic process
localization
angiogenesis
cytokinesis
ion transport
RNA localization
female gamete generation
synaptic transmission
primary metabolic process
acyl-CoA metabolic process
dorsal/ventral axis specification
visual perception
cellular process

Supplemental Table 2: List of PANTHER Protein Classes unchanged (-2 to 2-fold change) by ProteoMiner or with $p > 0.05$.

histone
intermediate filament binding protein
intermediate filament
aspartic protease
endodeoxyribonuclease
Hsp90 family chaperone
translation factor
actin and actin related protein

antibacterial response protein
transferase
zinc finger transcription factor
potassium channel
acyltransferase
cytokine receptor
methyltransferase
sodium channel
calcium-binding protein
amino acid kinase
homeobox transcription factor
helix-turn-helix transcription factor
KRAB box transcription factor
TGF-beta receptor
mutase
transaldolase
phosphodiesterase
extracellular matrix protein
ATP synthase
kinase inhibitor
cysteine protease
glycosyltransferase
DNA polymerase processivity factor
primase
DNA ligase

metalloprotease
G-protein modulator
protease inhibitor
major histocompatibility complex antigen
ribosomal protein
acetyltransferase
extracellular matrix glycoprotein
phosphatase activator
deaminase
ribonucleoprotein
cell junction protein
microtubule binding motor protein
enzyme modulator
immunoglobulin receptor superfamily
glucosidase
transporter
cation transporter
microtubule family cytoskeletal protein
intracellular calcium-sensing protein
calmodulin
peptide hormone
carbohydrate phosphatase
growth factor
DNA glycosylase
amylase

phosphatase
extracellular matrix structural protein
RNA methyltransferase
phospholipase
non-motor microtubule binding protein
kinase activator
surfactant
apolipoprotein
dehydrogenase
centromere DNA-binding protein
amino acid transporter
glycosidase
nuclear hormone receptor
nuclease
anion channel
cysteine protease inhibitor
oxygenase
phosphorylase
membrane-bound signaling molecule
ion channel
basic leucine zipper transcription factor
CREB transcription factor
DNA topoisomerase
nucleotide phosphatase
exoribonuclease

aminoacyl-tRNA synthetase
storage protein
serine protease inhibitor
tight junction
kinase modulator
membrane trafficking regulatory protein
vesicle coat protein
membrane traffic protein
transaminase
heterotrimeric G-protein
esterase
SNARE protein
DNA methyltransferase
epimerase/racemase
DNA-directed DNA polymerase
transketolase
G-protein
annexin
transmembrane receptor regulatory/adaptor protein
damaged DNA-binding protein
small GTPase
DNA-directed RNA polymerase
endoribonuclease
nucleotide kinase
basic helix-loop-helix transcription factor

hydrolase

ATP-binding cassette (ABC) transporter

structural protein

nucleotidyltransferase

carbohydrate transporter

ligand-gated ion channel

mRNA processing factor

decarboxylase

hydroxylase

oxidase

transcription factor

carbohydrate kinase

G-protein coupled receptor

mitochondrial carrier protein

transcription cofactor

lipase

helicase