

Table S3. Top gene ontology terms associated with *S. cerevisiae* genes that are up- or down-regulated in rich vs. minimal media.

| | Category | GO Term | $-\log_{10} P$ |
|----------------|----------|---|----------------|
| Up-regulated | BP | vacuole organization | 2.7 |
| | BP | organelle fusion | 2.7 |
| | BP | ER to Golgi vesicle-mediated transport | 2.7 |
| | CC | endoplasmic reticulum | 5.6 |
| | CC | endomembrane system | 5.3 |
| | CC | integral component of membrane | 5.0 |
| Down-regulated | BP | carboxylic acid metabolic process | 17.4 |
| | BP | small molecule metabolic process | 13.1 |
| | BP | organonitrogen compound metabolic process | 12.5 |
| | CC | cytosol | 5.6 |
| | CC | mitochondrion | 5.4 |
| | CC | cytoplasmic part | 3.9 |

GO, gene ontology; BP, biological process; CC, cellular component. P-value is based on the hypergeometric test.