Supplementary information

Systematic characterization of gene function in the photosynthetic alga *Chlamydomonas reinhardtii*

In the format provided by the authors and unedited

LIST OF SUPPLEMENTARY MATERIALS

Supplementary Table 1 | Source material used for screens Supplementary Table 2 | List of treatments and screens Supplementary Table 3 | LATCA screen and dose titration validation Supplementary Table 4 | Mutant phenotypes across all screens (https://doi.org/10.6086/D1Q96Z) Supplementary Table 5 | FDRs for GO term enrichment Supplementary Table 6 | FDRs for all genes in all screens Supplementary Table 7 | High-confidence gene-phenotype relationships Supplementary Table 8 | Annotation of 50 gene-phenotype relationships Supplementary Table 9 | Suggested new gene names Supplementary Table 10 | Phenotypic and transcriptomic correlations of genes with highconfidence phenotypes Supplementary Table 11 | Cluster annotations with yeast, mouse, and Arabidopsis orthologs Supplementary Table 12 | Mutant barcode read counts (https://doi.org/10.6086/D1Q96Z) Supplementary Table 13 | List of samples that were averaged Supplementary Table 14 | Chlamydomonas and Arabidopsis strains used in this study Supplementary Table 15 | Primers used in this study

Supplementary Data 1 | LATCA compound structures

Supplementary Data 2 | Java TreeView files of FDR less than 0.3 gene clusters