**Description of Additional Supplementary Files:** 

Supplementary Data 1: Protein pairs in interaction perturbation screening

Supplementary Data 2: Cutoff values used in sequence data processing

Supplementary Data 3: 52 ATGL single amino acid mutants

Supplementary Data 4: Co-IP results of the 52 ATGL single amino acid mutants (log2 fold change)

Supplementary Data 5: Quantification of cells with LDs