

Description of Additional Supplementary Files:

Supplementary Dataset 1. *p-adj* values of the RNAseq analysis.

Supplementary Dataset 2. Gene names of transcription factors used in the RNAi screen and *alg-1* reporter levels upon RNAi silencing.

Supplementary Dataset 3. Differentially expressed miRNAs according with the small RNAseq data.

Supplementary Dataset 4. List of miRNA targets predicted by TargetScan and overlap with genes upregulated in *alg-1(gk214)* mutants.