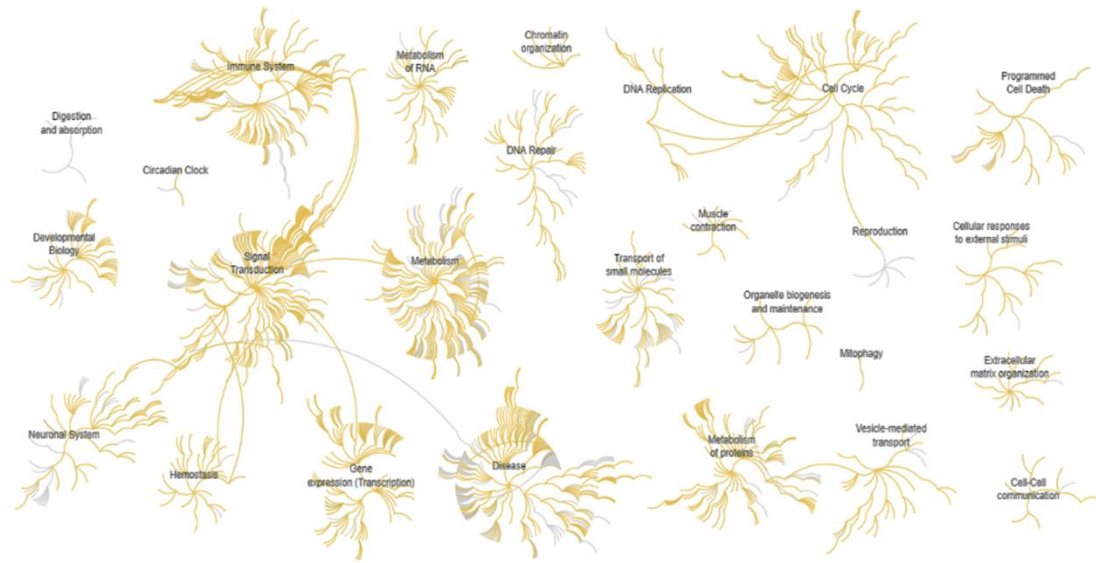
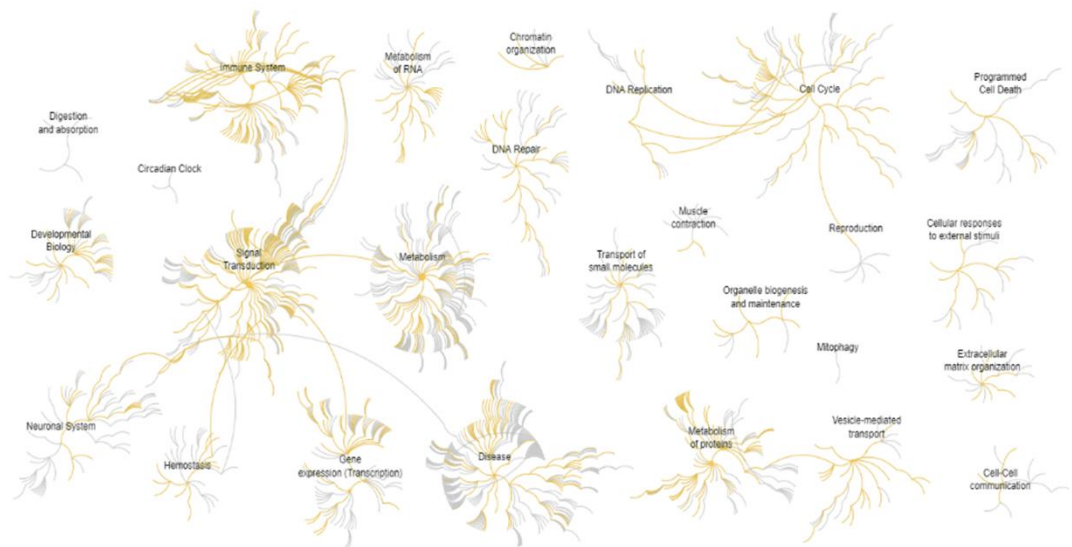


**Figure S1.** Torin 1 induces autophagy in a time-dependent manner in A549 but not in A549-ΔANXA1. (A) A549 cells were treated with Torin 1 over various time points (0, 2, 4, 8, 16 and 24 h). The cells lysates were then collected and a western blot analysis using LC3 and ANXA1 antibody was performed. (B) Quantification of LC3 II expression is shown using image J (<https://imagej.nih.gov/ij/>). Data is a representative of three independent experiments.

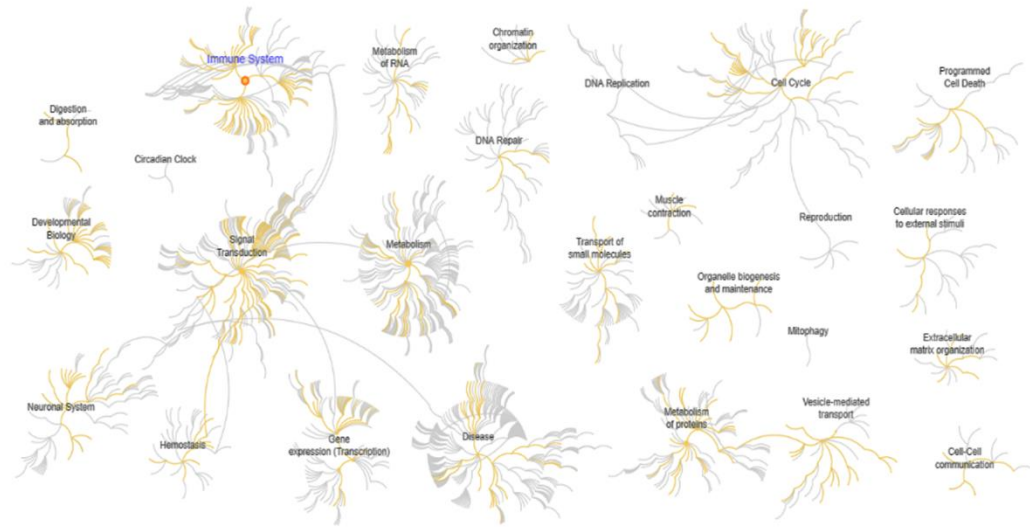
WT UP



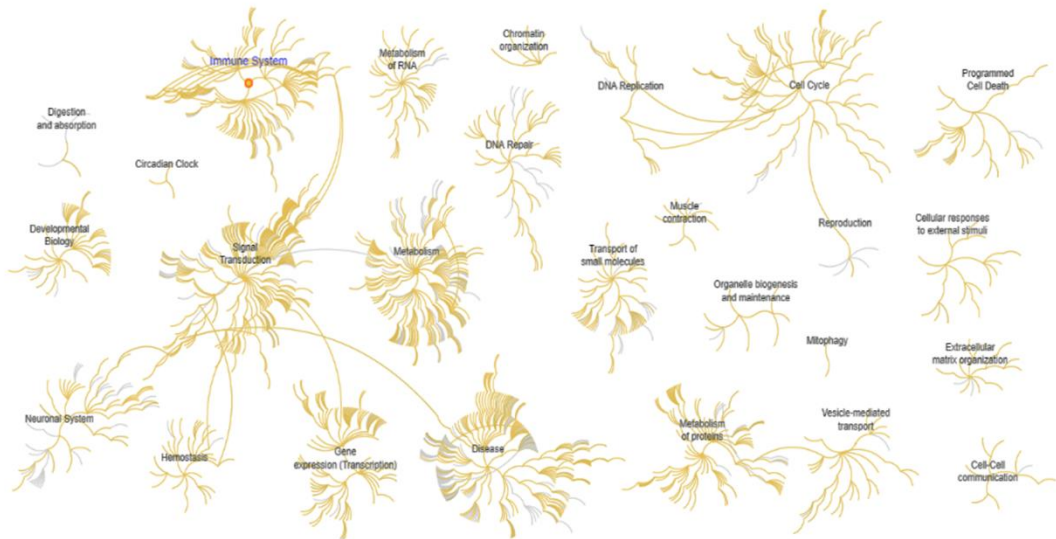
WT DOWN



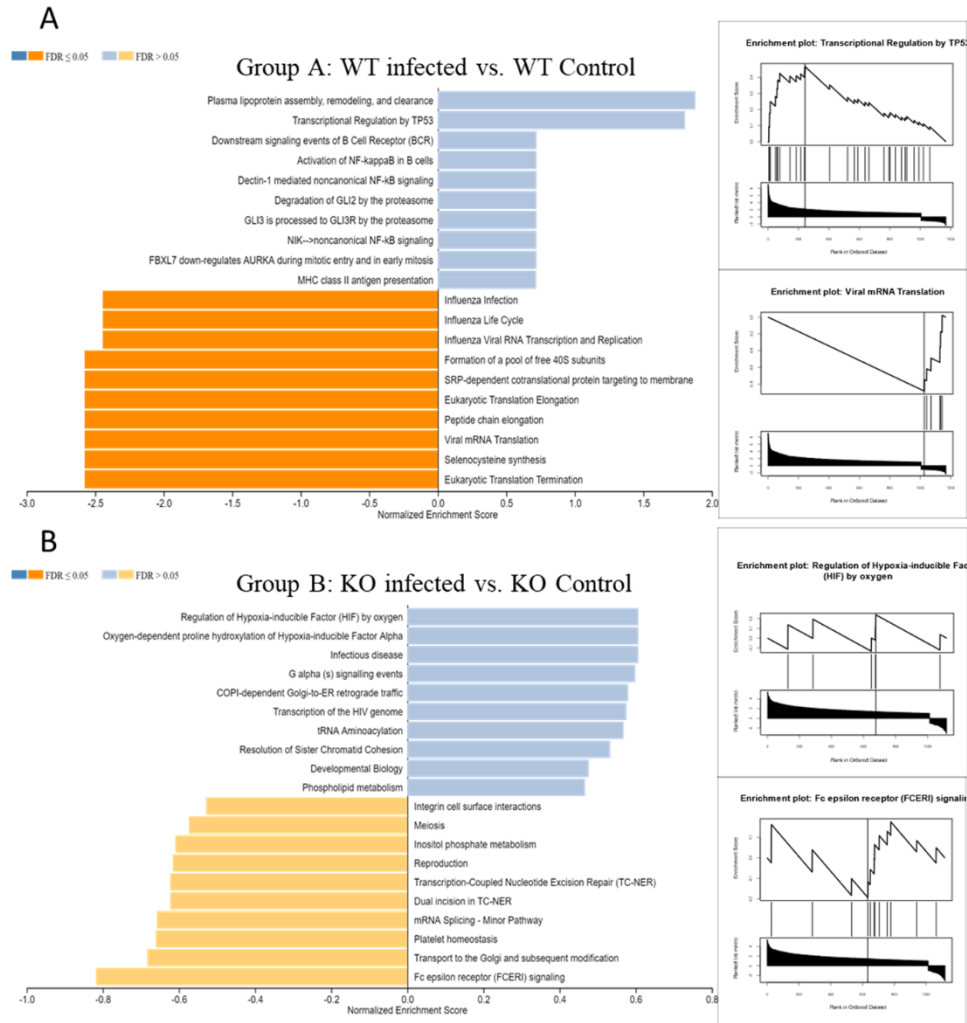
KO DOWN



KO UP



**Figure S2.** Pathways involved in the response caused by IAV infection in A549 (WT) and A549 $\Delta$ ANXA1(KO) infected cells. A genome-wide overview of the results of pathway analysis for 4 groups. The center of each of the circular “bursts” is the root of one top level pathway. Each step away from the center represents the next level lower in the pathway hierarchy. The color code denotes over-representation of that pathway in the input dataset. Light grey signifies pathways which are not significantly over-represented.



**Figure S3.** Gene Set Enrichment Analysis (GSEA) analysis in IAV infected A549 WT and A549  $\Delta$ ANXA1 cells. 10 positive related categories and 10 negative related categories are identified as enriched categories in the bar chart and selected enrichment plot are shown. **(A)** Significant enriched pathways of the highly expressed DEGs in upregulation and downregulation pattern in group A (WT infected vs. WT Control). **(B)** Significant enriched pathways of the highly expressed DEGs in upregulation and downregulation PATTERN in group B (KO infected vs. KO CONTROL).