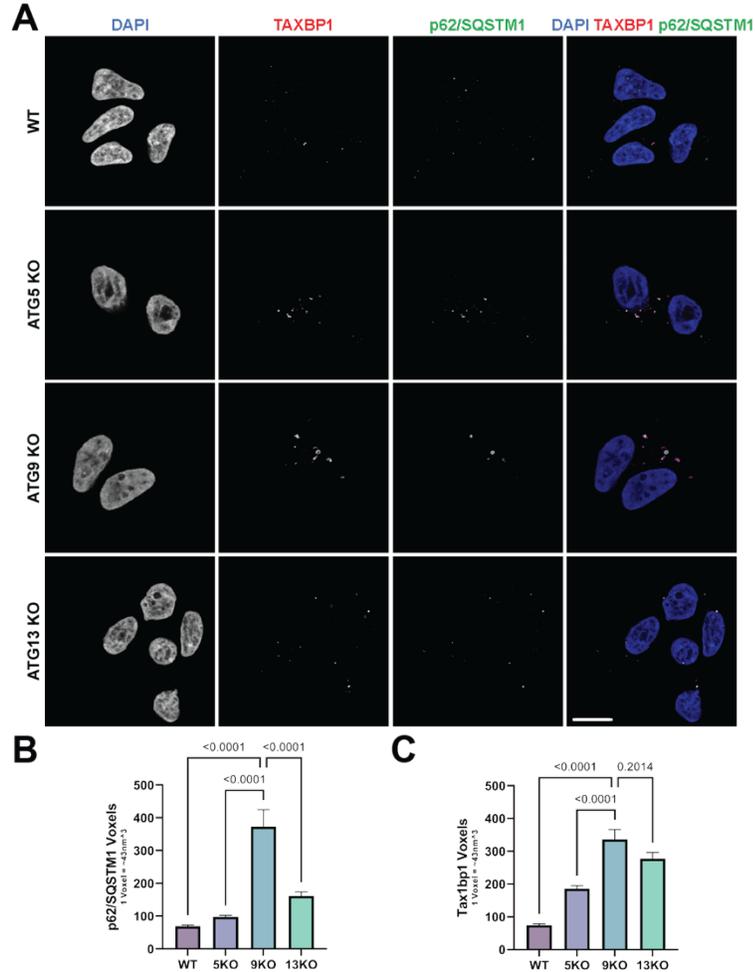
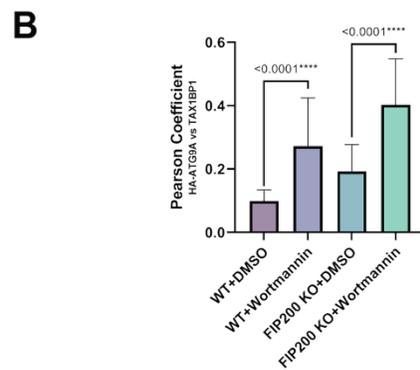
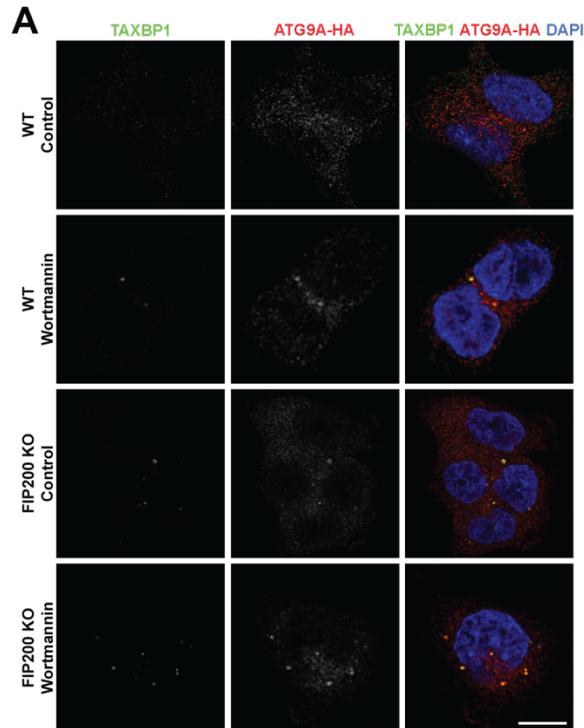


## Supplemental Material

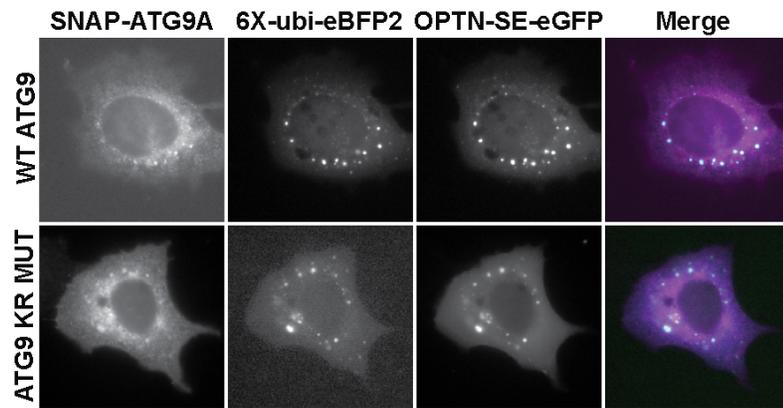


**Supplemental Figure 1. Large p62 clusters in ATG KO cell lines colocalize with TAX1BP1 (A)** Confocal imaging of endogenous p62 and TAX1BP1 in WT and ATG5, ATG9A and ATG13 KO HCT-116 lines. **(B)** Quantification of endogenous p62 puncta size from the experiment in panel A. Quantitation is from 3 replicates with error bars representing SD. *P*-values were calculated using a two-tailed student *t*-test for pair-wise comparison. **(C)** Quantification of endogenous TAX1BP1 puncta size from the experiment in panel A. Quantitation is from 3 replicates with error bars representing SD. *P*-values were calculated using a two-tailed student *t*-test for pair-wise comparison



**Supplemental Figure 2. ATG9A accumulates at p62 condensates in the absence of FIP200 (A)**

Confocal imaging of endogenous TAX1BP1 and endogenously HA-tagged ATG9A in HCT-116 cells treated with or without 1  $\mu$ M Wortmannin for 4 hours (scale bar = 10  $\mu$ m) (B) Quantification of ATG9A-HA and FIP200 colocalization by Pearson's coefficient. Quantitation is from 3 replicates with error bars representing SD. *P*-values were calculated using a two-tailed student *t*-test for pair-wise comparison



**Supplemental Figure 3. Artificial condensates composed of 6X-ubiquitin and OPTN recruit ATG9A.**

U2OS cells stably expressing snap-ATG9A were transiently transfected with 6x-ubiquitin and mutant OPTN-SE. Imaging of SNAP, BFP2, and eGFP was done 1 frame/s.