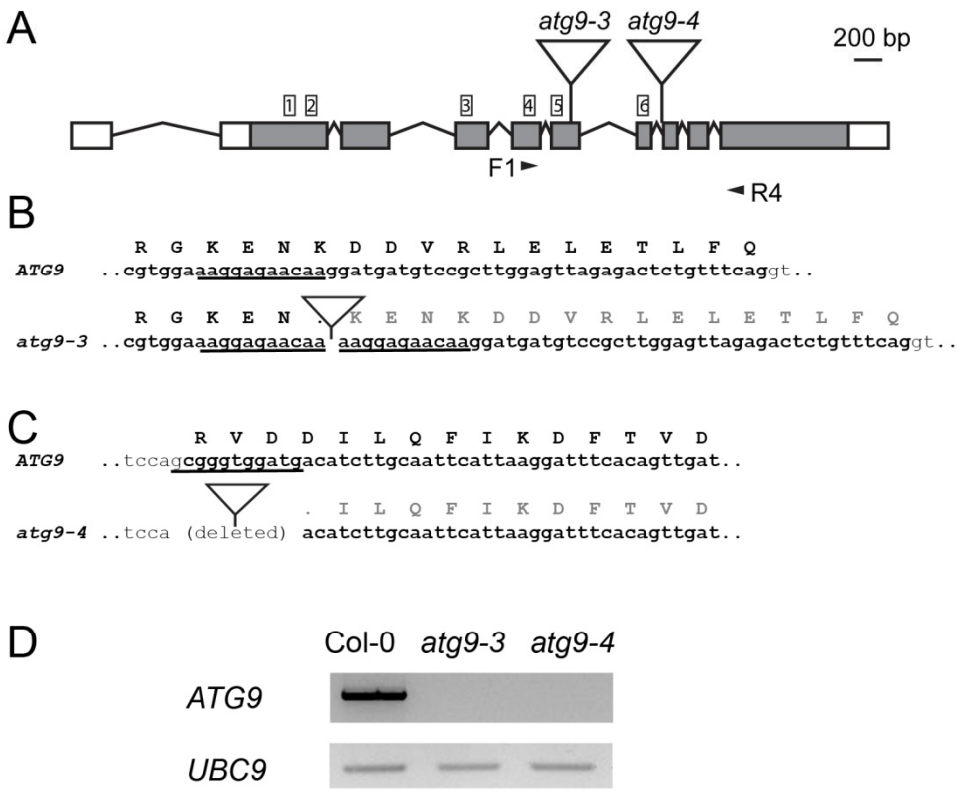
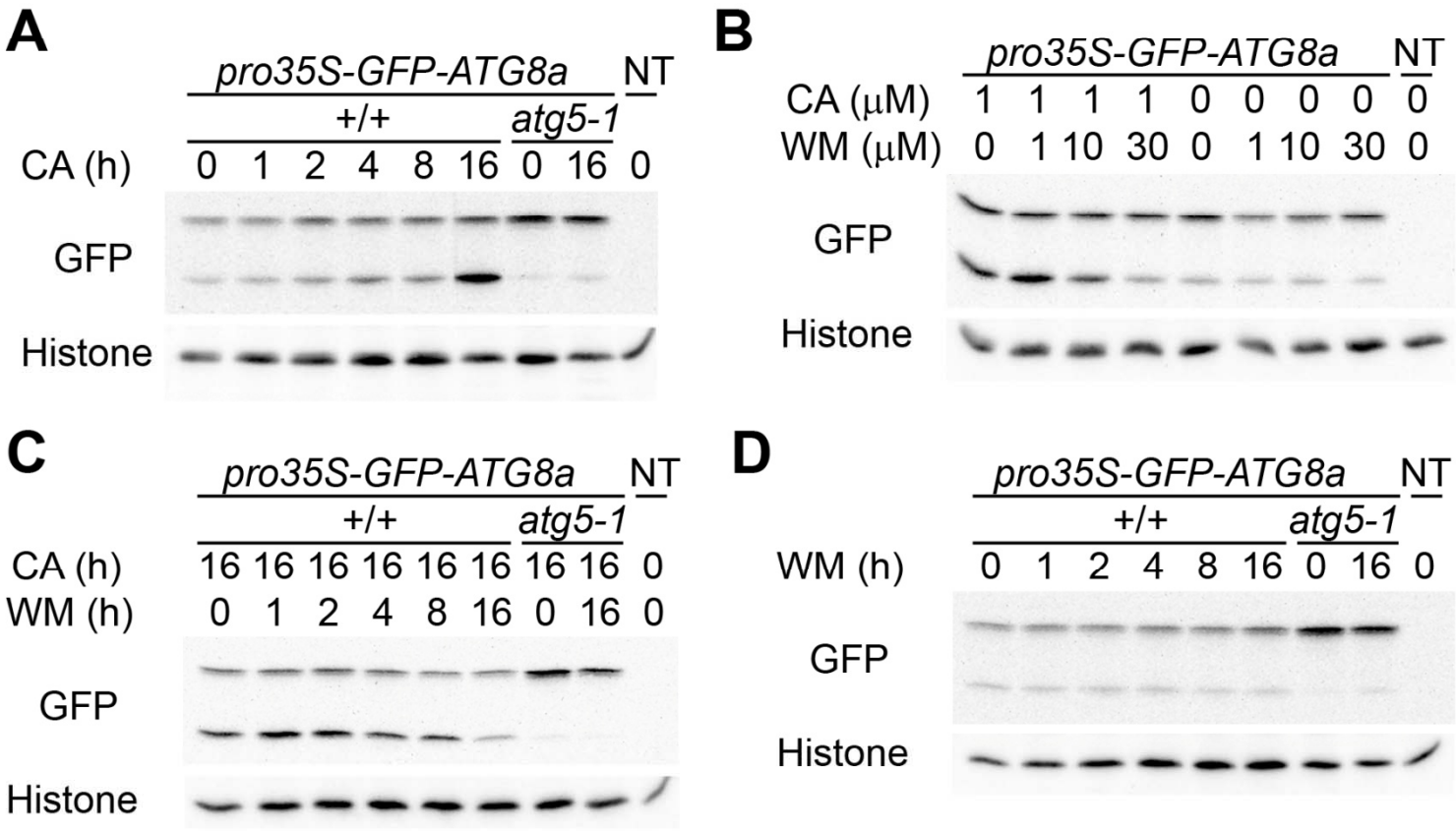


Supplementary Fig. S1. Molecular defects of *atg9-3* and *atg9-4* mutants. Triangles indicate insertion of T-DNA into the *ATG9* gene. **(A)** Diagram of *Arabidopsis ATG9* gene. Exons are represented using boxes, which are connected by lines signifying introns. White boxes illustrate untranslated regions, while grey boxes represent coding regions. Positions of primers for RT-PCR analysis are denoted using arrowheads. Numbered rectangles indicate exonic regions encoding six conserved transmembrane domains predicted using TMpred (http://www.ch.embnet.org/software/TMPRED_form.html). **(B and C)** Nucleotide sequences near T-DNA insertion sites in genomic DNA of *atg9-3* **(B)** and *atg9-4* **(C)** were compared with that of wild type (*ATG9*). Underlining indicates sequences that were duplicated **(B)** or deleted **(C)** in the mutants. Bold and plain fonts represent exonic and intronic sequences, respectively. Deduced amino acid sequences are shown above the exonic sequences, by using grey letters representing amino acids that may not be translated due to T-DNA insertion. **(D)** RT-PCR analysis by using primers F1 and R4 (*ATG9*) to show that *atg9-3* and *atg9-4* are transcript-null. RNA was prepared using seedlings grown on solid medium for 2 wk. Nucleotide sequences of primers are as follows: ATG9_F1, gctgctgtcttaatcatcattgcg; ATG9_R4, cttcccaagagaatctgactccca; UBC9_F3, ccgttgcggaagacatgtttcatt; UBC9_R2, tagggctcttccttaaggacagta.



Supplementary Fig. S2. Test showing the effects of concanamycin A (CA) and wortmannin (WM) on autophagic marker GFP-ATG8a. Eight-day-old *pro35S-GFP-ATG8a* seedlings were further incubated in liquid medium containing dimethylsulfoxide (DMSO), CA, WM, or a combination of CA and WM. Seedling extracts were prepared for immunoblot analysis by using anti-GFP (upper panel) or anti-histone H3 (lower panel; loading control) antibodies. NT, non-transgenic Col-0 extract. **(A)** Seedlings were treated with 1 mM CA for the indicated number of hours. **(B)** Seedlings were treated with CA or WM at the indicated concentrations for 16 h. **(C)** Seedlings were treated with 30 mM WM and 1 mM CA for the indicated number of hours. **(D)** Seedlings were treated with 30 mM WM for the indicated number of hours.