Figure S1. Quantitative analysis of transmission electron microscopy of autophagy-related structures in ASHE-treated HuH-7 cells from Fig. 4. (A) Number and (B) percentage of autophagic structures (autophagosomes and autolysosomes) in ASHE-treated HuH-7 cells. A total of seven randomly selected cells were examined. Data are presented as the mean ± standard deviation. *P<0.05 vs. untreated cells. ASHE, *Acanthopanax senticosus* Harms root extract.

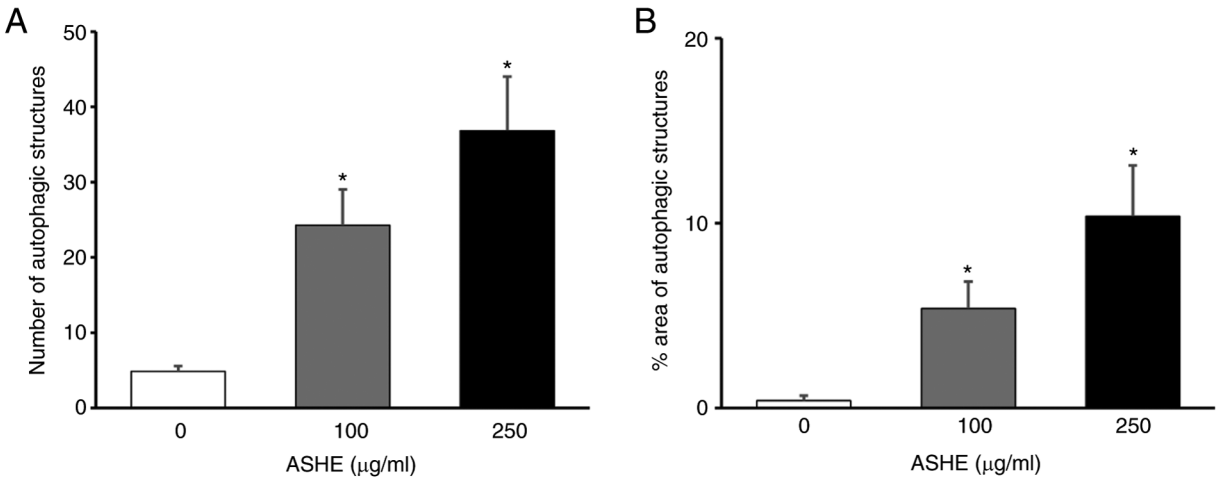

Figure S2. Rubicon protein expression in HuH-7 and HepG2 cells treated with ASHE in the presence of CQ or bafilomycin A1. HuH-7 and HepG2 cells were co-treated with ASHE and (A) CQ (HuH7, 0.5 μM; HepG2, 2 μM) for 72 h or (B) bafilomycin A1 (HuH7, 50 nM; HepG2, 125 nM) for 2 h. Protein expression was detected by western blotting. Actin was used as the loading control. ASHE, *Acanthopanax senticosus* Harms root extract; CQ, chloroquine; Rubicon, run domain Beclin-1-interacting and cysteine-rich domain-containing.

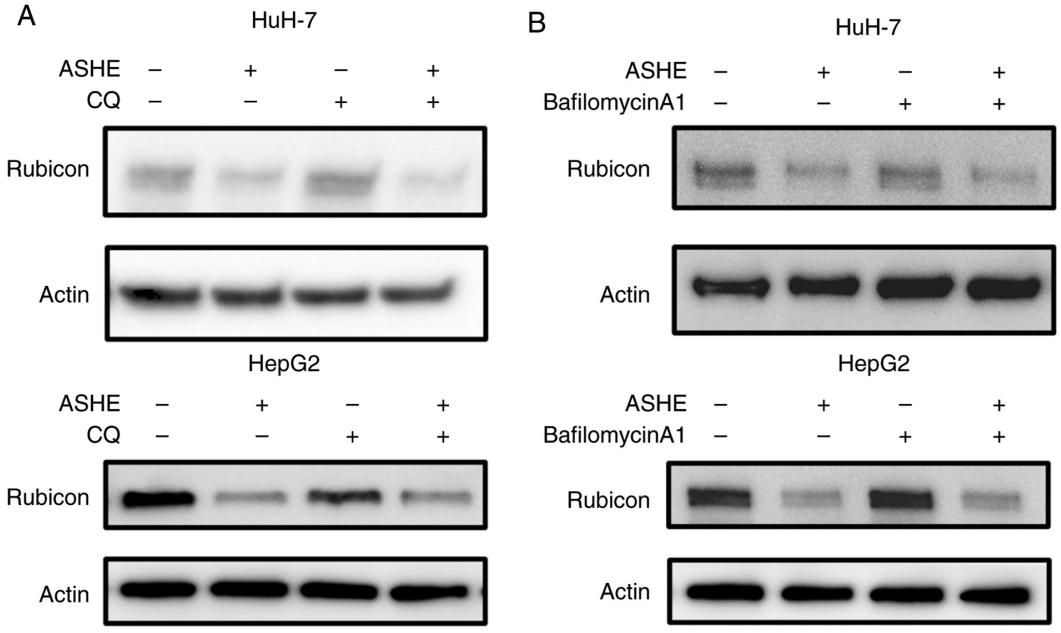

Figure S3. Rubicon mRNA expression in HuH-7 and HepG2 cells was examined using reverse transcription-quantitative PCR. The Y-axis indicates fold change of *RUBCN* expression in HuH-7 and HepG2 cells treated with ASHE for the indicated time periods relative to that in the untreated cells. Relative expression of *RUBCN* was normalized to that of β-actin. Data are presented as the mean ± standard deviation of three independent experiments. ASHE, *Acanthopanax senticosus* Harms root extract; Rubicon, run domain Beclin-1-interacting and cysteine-rich domain-containing.