

### Supplemental data legends

**Sup Figure 1 VacA induced p62 generation in a time-dependent manner.** AZ521 (a) or AGS (b) cells were incubated with 120 nM heat-inactivated (IA) or wild-type VacA (A) for the indicated time points at 37 °C and the cell lysates were subjected to immunoblotting with anti-LC3B, anti-p62 or anti- $\alpha$ -Tubulin antibodies, which served as a loading control. A blot representative of two separate experiments is shown.

- a. AZ-521 or AGS cells were incubated with 120 nM heat-inactivated (IA) or wild-type VacA (A) for 4 h at 37 °C and the cell lysates were subjected to immunoblotting with anti-LC3B, anti-p62, anti-LRP1 or anti- $\alpha$ -Tubulin antibodies. A blot representative of two separated experiments is shown. Quantification of VacA-induced LC3-II levels in the cells was performed by densitometry (right panel). Data are means and SD of values from two independent experiments.

### Sup Figure 2. Effects of 3-MA and Beclin-1 silencing on VacA-induced LC3-II generation.

- a. AZ-521 cells were pretreated with 1 mM 3-MA for 30 min at 37 °C and then incubated with 120 nM heat-inactivated (IA) or wild-type VacA (A) for 4 h at 37 °C. Cell lysates were subjected to immunoblotting with anti-LC3B antibody or anti- $\alpha$ -tubulin antibody as a loading control. A blot representative of three separate experiments is shown. Quantification of VacA-induced LC3-II levels in the cells was performed by densitometry (bottom panel). Quantification of VacA-induced LC3-II levels in AZ-521 cells was performed by densitometry (bottom panel). Data are presented as mean  $\pm$ SD (n=3). N.S., not significant.
- b. NC or Beclin-1 siRNA-transfected AZ-521 cells were incubated with 120 nM heat-inactivated (IA) or wild-type VacA (A) for 4 h at 37 °C and the cell lysates were subjected to immunoblotting with anti-LC3B or anti-Beclin1 antibodies.  $\alpha$ -Tubulin served as a loading control. A blot representative of three separate experiments is shown. Quantification of VacA-induced LC3-II levels in the indicated siRNA-transfected AZ-521 cells was performed by densitometry (bottom panel). Data are presented as mean  $\pm$ SD (n=3) . N.S., not significant.