αv-integrins and toll-like-receptors activate autophagy components to regulate GC B cell responses.

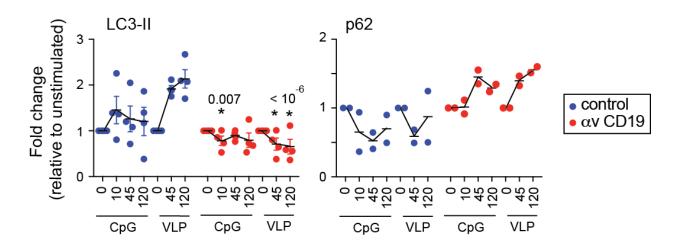
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Supplementary Data:

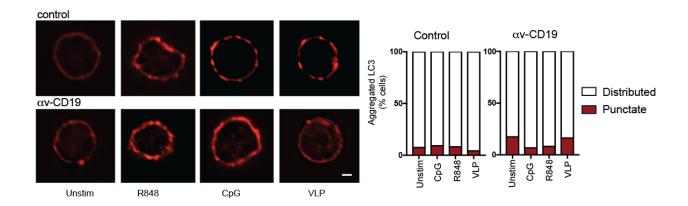
Supplementary Figure 1: Impaired LC3 lipidation and p62 degradation in αv -knockout B cells.

Supplementary Figure 2: TLR signaling does not lead to activation of autophagy proteins in non-GC follicular cells.

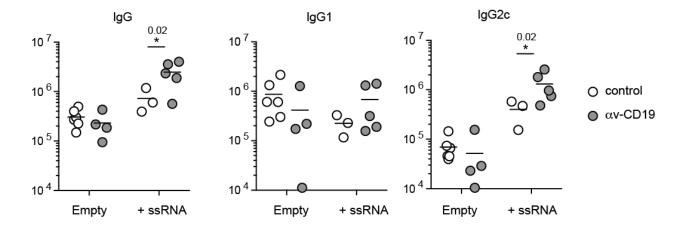
Supplementary Figure 3: αν does not affect antibody response to VLPs without ssRNA.



Supplementary Figure 1: Impaired LC3 lipidation and p62 degradation in αv -knockout B cells. Quantification of western blots of LC3-II and p62 of sorted GC B cells from αv -CD19 and control mice 14 days after immunization with VLP, following CpG DNA or VLP stimulation for the indicated time (mins) (as shown in Figure 4B. LC3-II or p62 levels were first normalized to protein loading (based on levels of β -actin), and then expressed relative to the level in unstimulated cells. Each point represents data from a single blot and are expressed as mean (p62) or mean \pm sem (LC3-II). *P*-values for comparison of control and αv -CD19 cells at each time point are shown (Student's t-test corrected for multiple comparisons using Holm-Sidak method).



Supplementary Figure 2: TLR signaling does not lead to activation of autophagy proteins in non-GC follicular cells. Confocal images of sorted primary GC B cells (as in Figure 4), treated with CpG DNA, R848 or VLP for 2 hr and stained with LC3 antibody. Quantification of LC3 reorganization after stimulation with indicated TLR ligands is presented as bar graphs. Data are based on analysis of at least 30 cells/ condition.



Supplementary Figure 3: αv does not affect antibody response to VLPs without ssRNA. Serum anti-VLP antibody titers in control and αv -CD19 mice immunized with $2\mu g$ VLPs with (+ssRNA) or without ssRNA (empty VLPs) measured 14 days after immunization. All data points represent individual mice with mean shown. *, statistically significant difference between control and αv -CD19 mice, p-value shown, Student's t-test.