

□ +CD3/28 +CQ20mM

60

40

20

SFig. 1 Autophagy is induced with allogeneic and non-specific TCR stimulation. Whole-cell lysates were prepared from purified splenic T<sub>con</sub> cells and stimulated for 24hours with anti-CD3/CD28 antibodies in the absence or presence of chloroquine (CQ) 10µM. (a) Schematic of autophagy inhibitors, CQ and 3-Methyladenine (3-MA), illustrating site of inhibition (b) Allogenic activated T cells (right) alone or treated with rapamycin (1µM) or chloroquine (CQ; 10µM) were prepared for western blot analysis for the presence of LC3-I and LC3-II bands. Purified T<sub>con</sub> cells were used as controls. Graph of the relative intensities (left) of LC3 II bands in relative units (R.U.) after their quantification and normalization to βactin. Left panel: Western blot for the presence of LC3-II bands. Right panel: graph of the relative intensities of LC3 II bands after their quantification and normalization to β-actin in 3 separate experiments. After 4 days of allogenic stimulation, T<sub>con</sub> and activated T cells were processed for electron microscopy (c) Activated T cells were compared to allogeneic activated T cells treated with 10 uM CQ. The red arrows indicate the location of identifiable autophagosomes in the cell cytoplasm. Unstimulated C57BL/6 T cells were used as controls (scale bars, 500 nm whole cells; 100 nm red box). (d) Purified splenic T<sub>con</sub> cells were stimulated for 24hours with anti-CD3/CD28 antibodies in the presence or absence or of chloroquine (CQ) 10 µM and rapamycin (Rapa) 1 mM. Activated T cells (right) were prepared for western blot analysis for the presence of LC3-I and LC3-II bands. Purified T<sub>con</sub> cells were used as controls. Graph of the relative intensities (left) of LC3 II bands in relative units (R.U.) after their quantification and normalization to β-actin. (e) CD90.2-positive T cells were sorted from the spleens of C57B/6 mice and stimulated with plate-bound anti-CD3 and soluble anti-CD28 antibodies, then analyzed for T cell proliferation based on <sup>3</sup>H-thymidine incorporation at 48 and 60 hours. The data in counts per minute (CPM) are the mean ± SEM of triplicates and are representative of 2 from 3 independent experiments. (f) Cells were analyzed at 48 hours after CD3/28 stimulation by flow cytometry. The graph shows the mean percentage of Annexin-V-positive T cells ± SEM of triplicates representative of 2 independent experiments. Data \*P< 0.05; \*\*P< 0.01; \*\*\*P< 0.001; \*\*\*\*P< 0.0001.