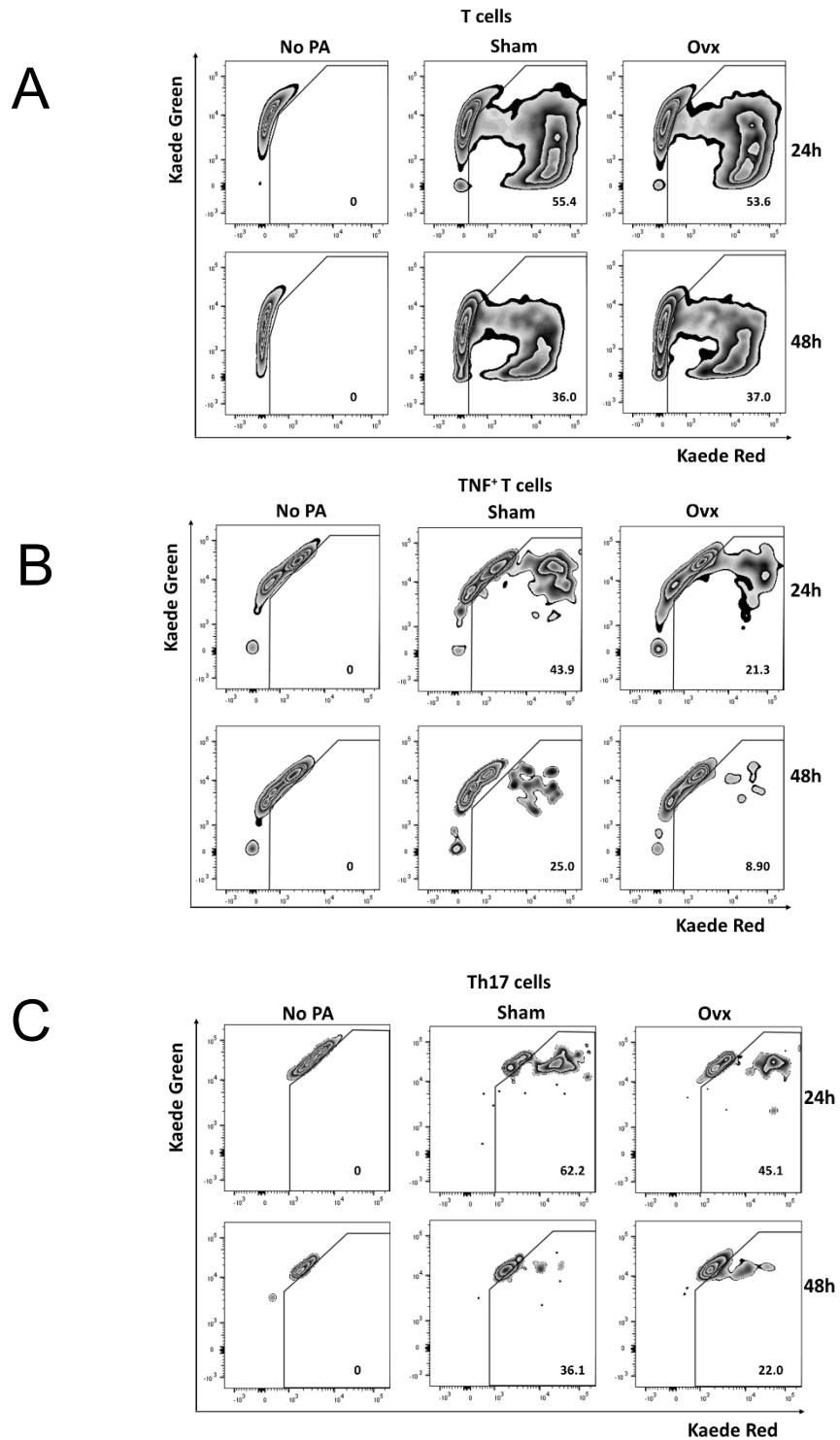


**Supplemental Figure 1. Representative images and flow cytometric analysis of bone samples and BM cells from Kaede mice subjected or not subjected to Payers' patches (PP) photoactivation (PA).** (A). Images of the femur and tibia and surrounding soft tissues harvested from Kaede mice subjected or not subjected to PA of PPs. (B) Representative fluorescence microscope images of BM cells harvested from Kaede mice subjected or not subjected to PA of PPs. (C). Representative fluorescence microscope images of Kaede mice BM cells subjected or not subjected to PA in vitro (Positive control). In panels **A,B** 10-week-old female SFB<sup>+</sup> Kaede mice were subjected to surgical laparotomy to access the PPs in the distal SI. PP cells were photoactivated by exposing them to a 390 nm light for 2 minutes. To make sure that no other cells were photoactivated, the whole mouse was covered with an aluminum foil blanket. Mice were sacrificed immediately after the photoactivation and femurs, tibias and BM cells collected for analysis.



**Supplemental Figure 2.** Representative flow cytometric analysis of T cells harvested from the PPs of sham operated and ovx Kaede mice. **(A)** Relative frequency of PP KaedeR total T cells. **(B)** Relative frequency of PP TNF<sup>+</sup> T cells. **(C)** Relative frequency of PP Th17 cells. 10-week-old female SFB<sup>+</sup> Kaede mice were subjected to surgical laparotomy to access the PPs in the distal SI. PP cells were photo-activated (PA) by exposing them to a 390 nm light for 2 minutes. Mice were sacrificed 24 or 48 hours later and the number of KaedeR T cells in PPs measured by flow cytometry.