Online Data Supplement

ICOS Controls T Cell Migration to the Lungs via Down-Regulation of CCR7 and CD62L

Tamson V. Moore, Bryan S. Clay, Judy L. Cannon, Alexander Histed, Rebecca A. Shilling, and Anne I. Sperling

Figure Legend

Figure E1: FTY720 treatment sequestered cells in the lymph nodes while Mel-14 treatment blocked lymph node entry. A. (*Left & Middle*) The total number of lymph node and spleen cells was quantified and compared in untreated, FTY720-treated and Mel-14-treated mice after adoptive transfer and immunization as described in Figure 3. (*Right*) The percent of antigen-specific CD4 cells was assessed by flow cytometry in the blood. **B.** The total number of CD4 T cells in the draining lymph nodes and spleens of B6 and $ICOS^{-/-}$ mice sensitized and challenged with or without Mel-14 treatment as described in Figure 6 were assessed by flow cytometry and quantified.

Figure E2: More activated $ICOS^{-/-}$ CD4 T cells are $CD62L^{high}$ than wild-type cells throughout the immune response. A. Wild-type hosts were given wild-type (solid lines, closed squares) or $ICOS^{-/-}$ DO11.10 (dotted lines, open triangles) cells and immunized as described in Figure 2. Between day 0 and day 13, CD62L expression was assessed by flow cytometry on the wild-type and $ICOS^{-/-}$ $KJ1\text{-}26^{+}CD4^{+}$ T cells and the percent of antigen-specific cells expressing CD62L at each time-point is shown. **B.** Percent $CD62L^{high}$ (*left*) and MFI of CCR7 (*right*) expression at each cell division of DO11.10 (solid lines, closed squares) or $ICOS^{-/-}$ DO11.10 (dotted lines, open triangles) cells activated *in vitro*. *In vitro* results have been replicated two independent times with $n \geq 3$ for each experiment.