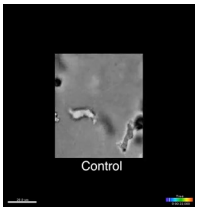
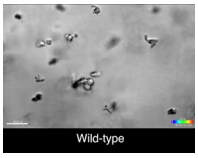
SUPPLEMENTAL MATERIAL

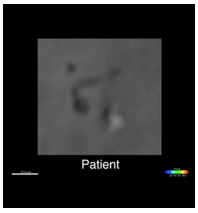
Zhang et al., http://www.jem.org/cgi/content/full/jem.20141307/DC1



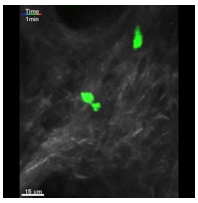
Video 1. Random T cell migration within a collagen gel matrix. Representative diffusion interference contrast (DIC) microscopy of T cells from a healthy control or DOCK8-deficient patient. Note elongation of patient T cells (red arrows) and spontaneous recovery in some cells.



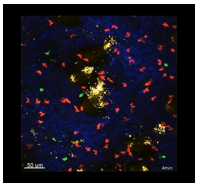
Video 2. Random NK cell migration within a collagen gel matrix. Representative DIC microscopy of NK cells from WT or Dock8-deficient mice, after expansion in IL-2. Note elongation of Dock8-deficient NK cells (red arrows).



Video 3. Migration-associated cytothripsis. Representative DIC microscopy of a T cell from a DOCK8-deficient patient migrating within a collagen gel matrix. PI was added toward the end of imaging, with positively staining fragments indicated by red arrows.



Video 4. Intravital two-photon microscopy of T cells within skin during acute HSV infection. Shown are several examples of Dock8-deficient (cpm) T cells with elongated processes (white arrows) that break off (circle) as the cell migrates. The last clip shows Dock8-replete WT (gBT-I) control T cells adoptively transferred along with the Dock8-deficient T cells for comparison.



Video 5. Intravital two-photon microscopy of virus-specific T_{RM} cells within skin after HSV infection. Red, WT T cells. Green, Dock8-deficient cpm T cell. Yellow, hair follicle. Blue, collagen.