

Descriptions of Additional Supplementary Files

Supplementary Movie 1

Description: A representative series of z-stack 4x-ExMAiryscan images of a human CD4⁺ T cell selected among 35 cells labelled with anti-CD45-AF488 (green, left), anti-CD3-CF633 (magenta; middle) and the merged image (right) with a step size of 62.5nm per frame. Scale bar in the merged image: 2 μ m.

Supplementary Movie 2

Description: MV-mediated interactions between a mouse OTII-Rag2^{-/-} CD4⁺ T cells and an antigen pulsed mouse B cell induce Ca²⁺ influx. A time-lapse of ODT images (A) overlaid with the corresponding Fluo-4 AM images (B). The mean intensities of ROI area (C; magenta) in each frame are plotted in the graph D.

Supplementary Movie 3

Description: MV-mediated interactions between mouse OTIIRag2^{-/-} CD4⁺ T cells and antigen pulsed mouse B cells induce Ca²⁺ influx. A time-lapse of ODT images (A) overlaid with the corresponding Fluo-4 AM images (B). The mean intensities of each ROI areas marked in C are plotted in the graph D.

Supplementary Movie 4

Description: MV-mediated interactions between mouse OTIIRag2^{-/-} CD4⁺ T cells and mouse B cells (no antigen pulsed) induce Ca²⁺ influx. A time-lapse of ODT images (A) overlaid with the corresponding Fluo-4 AM images (B). The mean intensities of each ROI areas marked in C are plotted in the graph D.