

Movie legend

The dynamic nature of dendritic cell motility and the interactions between mindin^{-/-} DCs and T lymphocytes are best appreciated in the original movie format. The six synchronous movies of wildtype (upper) and mindin^{-/-} (lower) co-cultures of dendritic cells with OTII CD4⁺ T cell shown here, were sampled at 2 minute intervals over a 10hr period, at 3 random locations for each class. DC:T cell ratio was used at 1:50 to achieve maximum interaction with T cells for each DC. Wildtype dendritic cells form stable, persistent clusters with OTII T cells as early as 2 hrs from time of cell mixing onwards, and persist. In contrast, clusters formed in the mindin-deficient DCs with OTII T cells appear to be transient (OTII cells trafficking in and out in a highly dynamic manner) and exhibit faster locomotion. Note also that for both classes, healthy extended dendritic cells are seen in abundance.