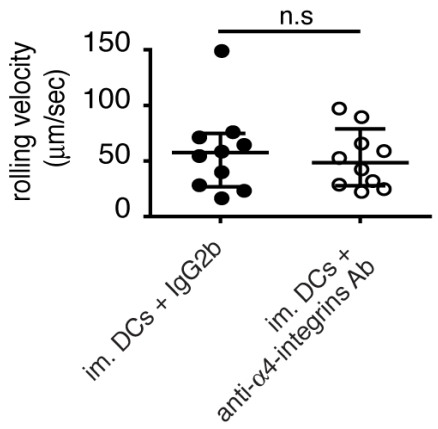
Supplementary Material

Supplementary Figure 1:



Suppl Fig. 1: Effect of α4-integrin blockade on the rolling velocity of immature dendritic cells within inflamed spinal cord white matter microvessels in SJL mice with EAE *in vivo*

The velocity of immature dendritic cells rolling within inflamed spinal cord white matter microvessels was evaluated in control conditions (IgG2b isotype control, filled circles) and upon α4–integrin blockade (PS/2, open circles). 10 rolling DCs in one mouse were evaluated per condition. Mann-Whitney U-Test was used to evaluate statistical significance.

Movies S1 and S2: Initial contact of immature dendritic cells (DCs; Movie S1) and LPS-matured DCs (Movie S2) by rolling or capturing with the inflamed spinal cord microvasculature in SJL mice with EAE.

Each video shows the real time observation of the initial contact of DCs with the inflamed spinal cord microvessels by rolling or capturing during the infusion of one aliquot of cells (1.16×10^6 cells/100µL) via the right carotid artery within one field of view. First, the inflamed spinal cord microvasculature is visualized by means of TRITC-dextran in the circulation of a SJL mouse with EAE within one field of view. Above the large spinal cord collecting vein, always placed at the bottom of each video frame, the spinal cord post-capillary venules can be visualized. After switching the fluorescence filter at the microscope, the infusion of 1 aliquot (1.16×10^6 cells/100µL) of CellTracker Green-labeled dendritic cells (DCs) starts. DCs can be

observed either passing through the corresponding vascular beds or interacting and firmly adhering to the microvasculature in real time (objective x10).

Movies S3 and S4: Adhesion of immature DCs (Movie S3) and LPS-matured DCs (Movie S4) to the inflamed spinal cord white matter microvasculature in SJL mice with EAE

Each movie shows the scanning of several fields of view within the entire spinal cord window 10 minutes after infusion of the total amount of dendritic cells (3.5×10^6 cells) in order to quantify those DCs that firmly adhere to the spinal cord microvasculature (objective x10).