



Figure S2

A: Mean intracellular calcium concentration versus mean cell velocity in migrating DCs. DCs were loaded with Oregon Green BAPTA 1-AM and imaged every 30s ($n=113$ cells from three independent experiments).

B: Mean intracellular calcium concentration versus mean cell velocity in migrating DCs in microchannels coated with fibronectin or FibroPEG(75/25) ($n>21$ cells from four independent experiments).

C: Distribution of velocity fluctuations ($\Delta V/V_0$) displayed by immature DCs migrating in micro-channels ($n=113$ cells from three independent experiments).

D: Expression of CD86 and CD40 in DCs treated ON with 100ng/ml CCL3 or 10 $\mu\text{g}/\text{ml}$ LPS.

E: Quantification of the median instantaneous speed of immature DCs migrating in micro-channels in the presence of 100ng/ml of CCL3.

P-values were calculated using a Mann-Whitney test, with respect to the Non-Treated DCs (NT). Boxes illustrate 10-90 percentiles of values and whiskers represent the range of values. P-values were calculated using a Kruskal-wallis test.

F: Velocity fluctuations and Ca^{2+} oscillations versus time in a single DC. Slow motility phases ($<50\%$ of max velocity) are shown as grey boxes and fast motility phases ($>50\%$ of max velocity) are shown as blue boxes.

G: Frequency of changes of direction versus velocity fluctuations displayed by immature DCs migrating in micro-channels ($n=113$ cells from three independent experiments)