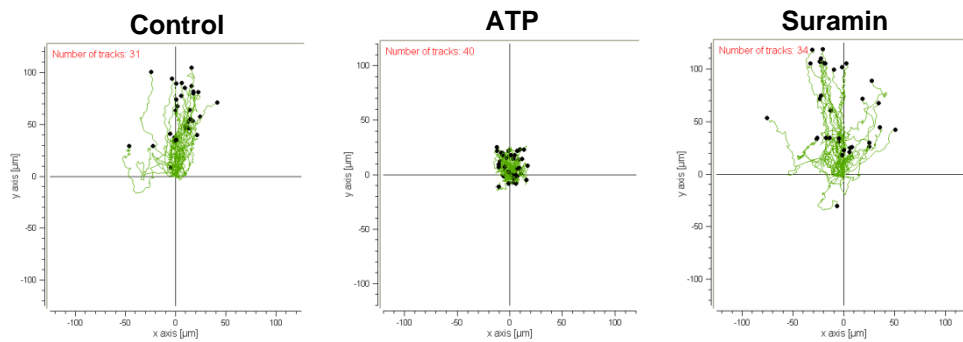


Supplementary Figure S3



Supplementary Figure S3

Human CD4⁺ T cells were seeded into a chemotaxis assay chamber and allowed to settle and migrate towards CXCL12 (2.5 nM). Time-lapse images were acquired for 30 minute and the migration tracks of individual cells were plotted. In the control condition, T cells generally migrated towards the chemokine with a good directionality as shown in Figure 5, and the migration tracks were mostly straight (N = 31 cell tracks shown). In the presence of extracellular ATP (100 μM), T cells migrated very little, and no longer responded to the chemokine gradient. Preincubation of T cells with P2X receptor antagonist suramin (100 μM) prevented the ATP-induced slow down and loss of chemotactic migration. However, the tracks remain significantly different to the control tracks in terms of directionality ($P < 0.001$), suggesting that the binding of ATP to P2X receptors may have a role in controlling the directionality during chemotactic migration (N = 34 cell tracks shown).