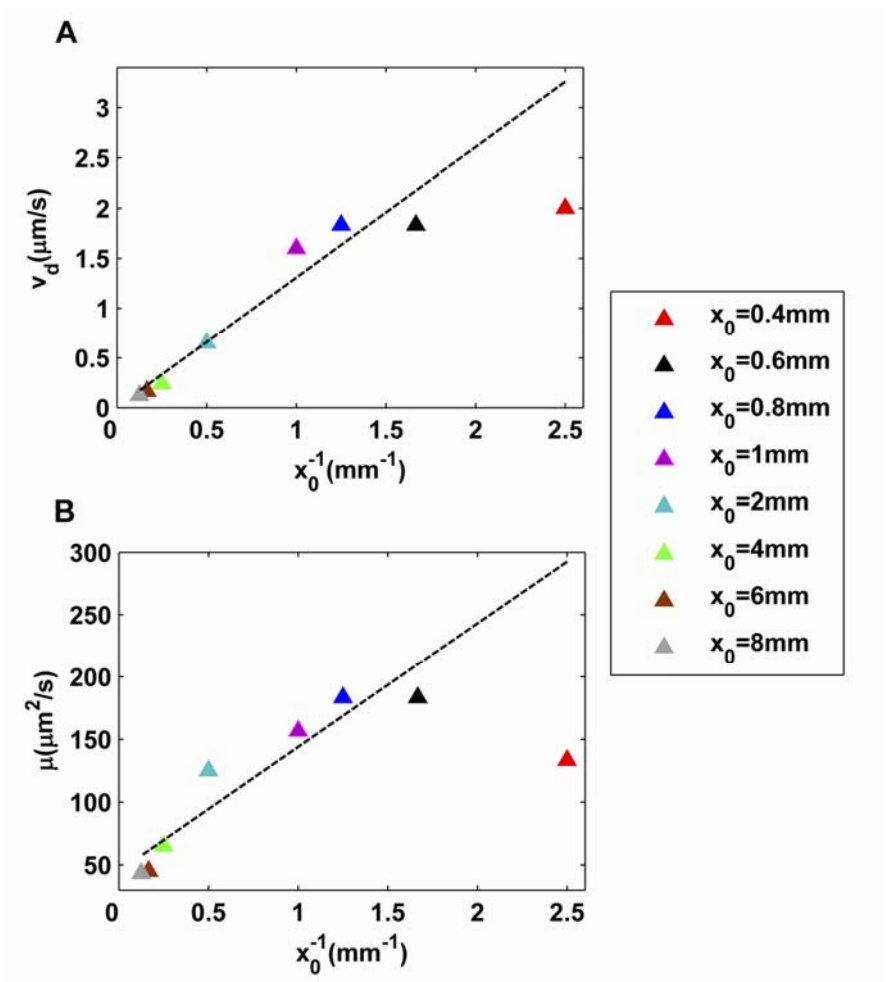

Figure S2 Chemotactic drift velocity and diffusion constant in exponential ligand concentration gradients. In exponential gradients both the center of mass $< x >$ and the mean standard deviation of cell locations $< x^2 >$ increase linearly with time. So we plotted drift velocity $v_d = d < x > / dt$ and diffusion constant $\mu = d < x^2 > / dt$ at different gradient G. They have the same transition gradient G_C which depends on the adaptation rate as explained in the text.