



**Figure S5. Checking for mass transport limitation; Simulation of the kinetic constants determined on sensor chip surfaces with different ligand densities. (a)** The simulated sensorgrams (kinetic parameters from data fitted to a simple 1:1 binding model) show that when increasing the ligand density, binding of analyte becomes mass transport limited. **(b)** Dissociation plot of the simulated curves. The slope of the  $\ln(R1/Rt)$  versus time represents the dissociation rate for that curve. **(c)** Dissociation plot of the dissociation phase of the experimental sensorgrams. The dissociation rate determined on surfaces 2 and 3 is slower than on surface 3 indicating that binding to surfaces 2 and 3 is mass transport limited. Furthermore, a slight curvature can be observed on the plots from surfaces 2 and 3.