

Figure S1. (HA/CHI) film thickness as a function of the number of bilayers, for all cases of pH (3.0 versus 5.0) and ionic concentration (0 versus 100 mM NaCl) variations.

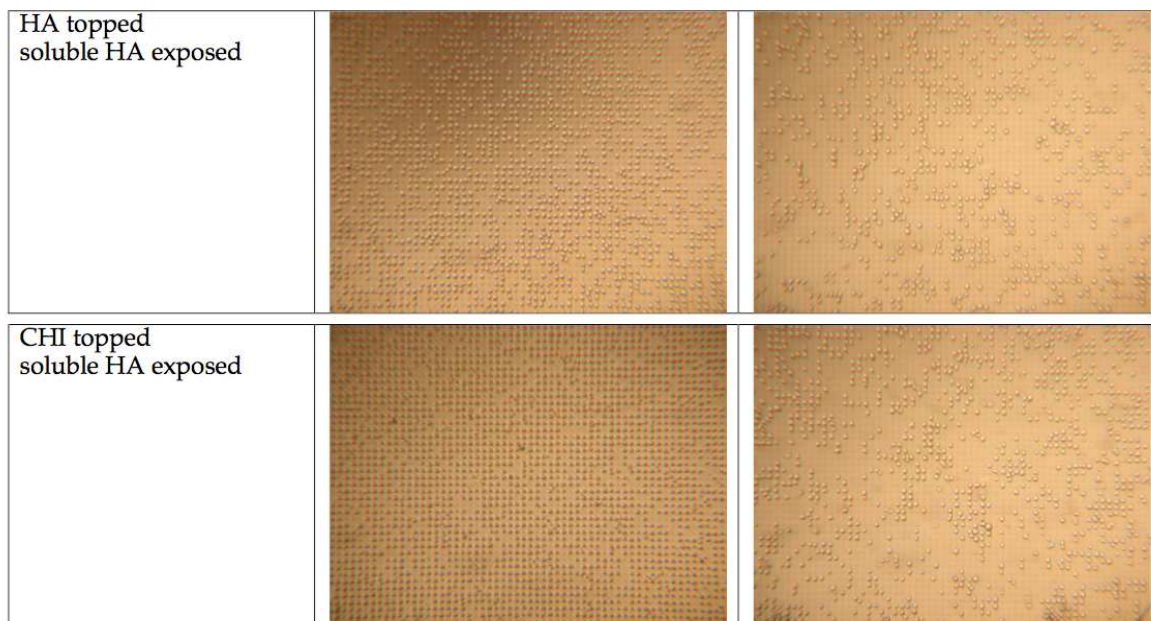
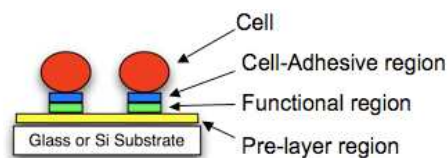


Figure S2. Array micrographs where B cells were seeded onto patterned HA or CHI-topped films built with and without 100mM NaCl, respectively, and soluble HA was added to competitively bind with CD44 or CHI.



Region	Components	Thickness (nm)
Cell-Adhesive	(+) Chitosan (CHI) (-) Hyaluronic acid (HA)	~ 20 - 57
Functional	(+) Fluorescein labeled poly(allylamine) (FITC-PAH) (-) Fe_3O_4 nanoparticles (MNP) (13 nm in diameter)	~ 190
Pre-layer	(+) Poly(diallyldimethylammonium chloride) (PDAC) (-) Poly(sodium 4-styrene sulfonate) (SPS)	~ 55 - 59

Note: NOT discrete layers: interpenetrated layers

Figure S3. Schematic of the multilayer patterned array – B cell system.