Supporting Information for:

Production of high-complexity frameshift neoantigen peptide microarrays

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Figure S1. Effect of amine surface density on IgG peptide binding for two high affinity IgG binding peptides. Average RFU for each replicate peptide is plotted as a function of serum dilution (x-axis) for the high avidity surface (red) and the 1/10 amine density surface (green) for the two peptide epitopes.



Figure S2. (a) Position of epitope peptides, APLARPRSRPAPAA (blue) and APLRRGRSWIMPSSF (red) in two-peptide microarray experiment. (b) RFU for each replicate of APLRRGRSWIMPSSF (n=4,727) for the 1:100 dilution on two different peptide microarrays from the 1/10 density wafer. High intensity binding is colored red while low intensity is colored blue.



50 100 150 200 250 300 350 400 450 500 550 600 650 Column

Figure S3. Positional distribution of APLARPRSRPAPAA binding at 1:800 serum dilution for the most dense surface and the surface with 10% density.



Figure S4. Equilibrium binding model for 1:1 IgG binding to peptide array peptides in absence of surface avidity.



Figure S5. (a) Positional distribution of peptides that bound IgG from ND30 in 16 out of 18 replicate peptide microarrays. (b) Data from (a) was overlaid with the positive rate to illustrate that high binding peptides were distributed throughout the peptide microarray.

