Electronic Supplementary Information (ESI)

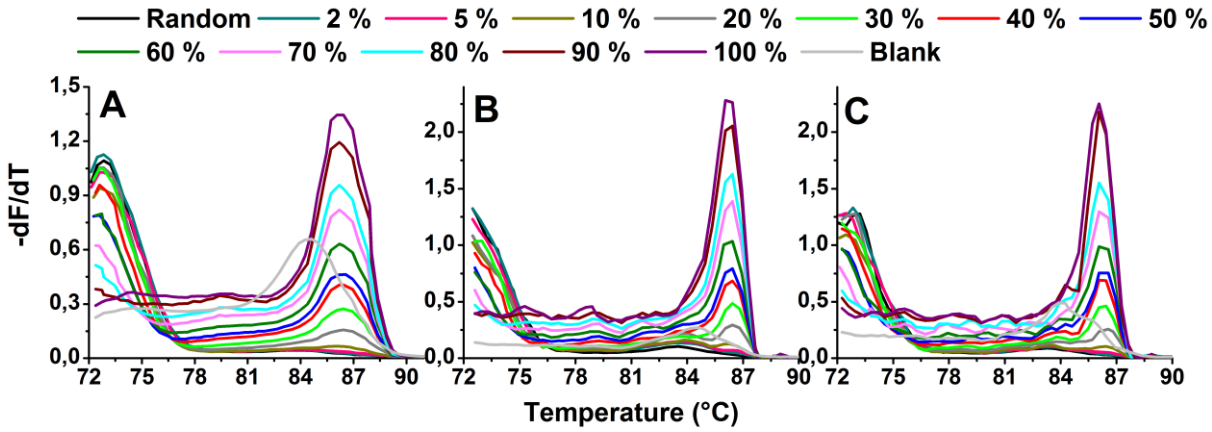


Figure S-1. rMCA data of simulated D17.4 enrichment in random library. rMCA is compared after reannealing at 70°C for 30 s (A), 1 min (B) and 2 min (C).

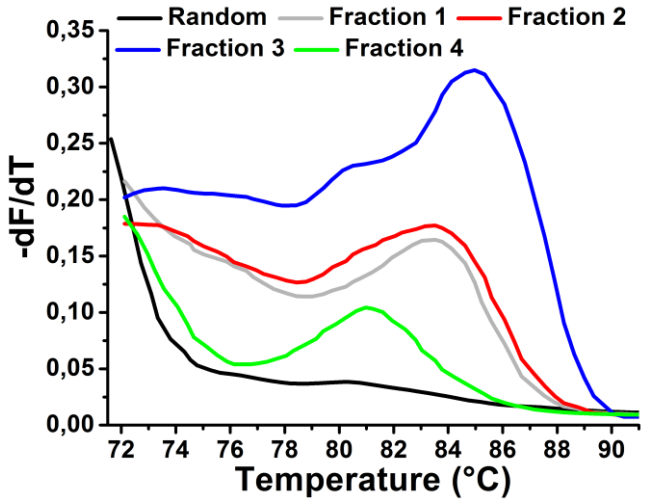


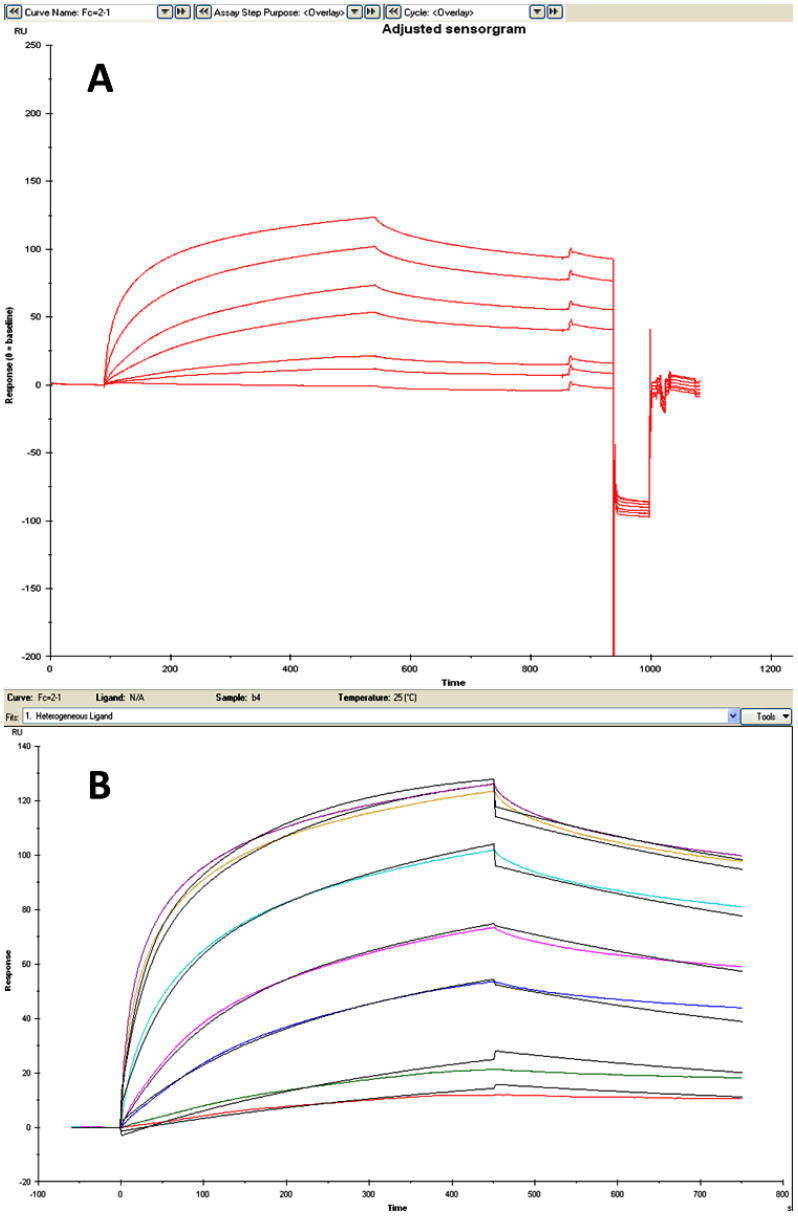
Figure S-2. rMCA data after SELEX round 10 for CRP – clear differentiation between DNA compositions of different fractions.

	Fraction 1	Fraction 2	Fraction 3	Fraction 4
Number of enriched sequences	5	2	1	4
Proportion of enriched sequences	23%, 16%, 7%, 7%, 5%	50% and 20%	90%	16% each

Table S-1. Sequencing analysis of selected oligonucleotides for CRP confirms enrichment in four fractions, with differences in extent of enrichment. For each fraction, the number of enriched sequences is given with the proportion of these sequences in the total DNA pool.

A.1	5' - GCA CCA GCA TAT TCG ATT GGA GGG GGG TAT TGA TTG ACA TAT TGA TCT TGT TTC TTG GGC TAG TAG GTG CAT CAG – 3'
A.2	5' - GCA CCA GCA TAT TCG ATT GTG GCG GGT TGT GAA GGG TGG AGT ATG GTC GTG TTG GTT GGG CTA GTA GGT GCA TCA G – 3'
A.3	5' - GCA CCA GCA TAT TCG ATT GGG AGC GCG GGG GAG AGT AGT GGG GAA CGG TGG AGA GTT GGG CTA GTA GGT GCA TCA G – 3'
A.4	5' - GCA CCA GCA TAT TCG ATT GGG AGG TGT GAA CGT TAT GTG GTA GAG AGA TGG GTG GTG GGG CTA GTA GGT GCA TCA G – 3'

Table S-2. Sequence information of the most enriched sequence in four SELEX fractions.



Figue S-3. Sensorgram (A) and Multi-cycle kinetic analysis (B) of 450s association and 300s dissociation at 30 µL/min flow rate of different concentrations (10-20-50-100-200-400-500 nM) of A1 in 10mM Hepes + 5mM $CaCl_2$ pH 7.4 on 150 RU CRP-coated CM4-chip. Regeneration is performed by 60s flush with 1M NaCl. Data fitting with model for heterogeneous ligand indicates two K_D values: 0.6nM and 19nM respectively. Analysis is performed with double referencing, by means of a reference flow cell immobilized with human Plasminogen and a zero concentration of A1.

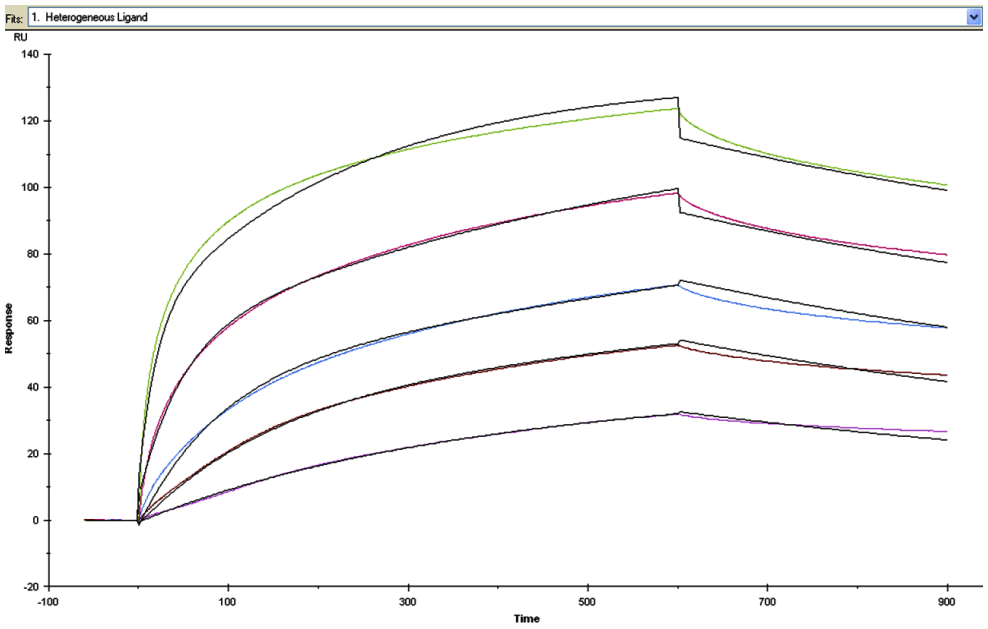


Figure S-4. Multi-cycle kinetic analysis of 600s association and 300s dissociation at 30 µL/min flow rate of different concentrations (20-50-100-200-500 nM) of A4 in 10mM Hepes + 5mM $CaCl_2$ pH 7.4 on 150 RU CRP-coated CM4-chip. Regeneration is performed by 60s flush with 1M NaCl. Data fitting with model for heterogeneous ligand indicates two K_D values: 13.2nM and 0.3nM respectively. Analysis is performed with double referencing, by means of a reference flow cell immobilized with human Plasminogen and a zero concentration of A1.

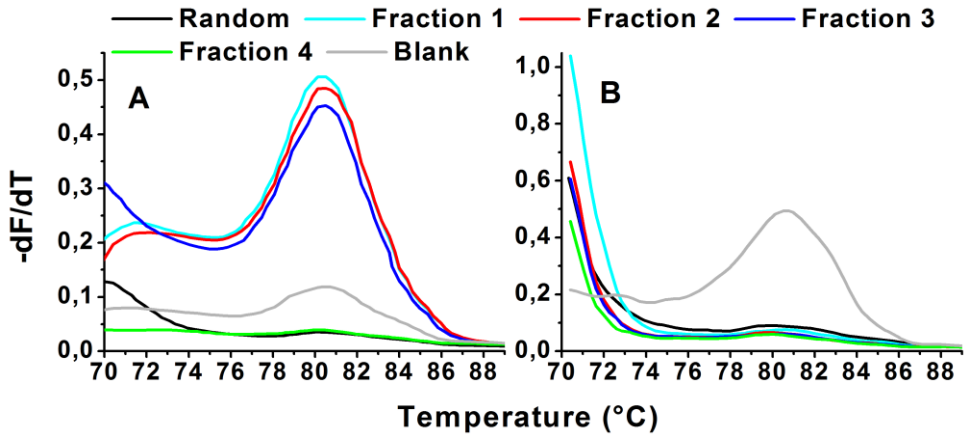


Figure S-5. rMCA data of four low copy fractions of SELEX pools before amplification (A) and after amplification (B).