

Figure S1: The MMS device allows significantly higher recovery of the beads in comparison to the CMACS chip.

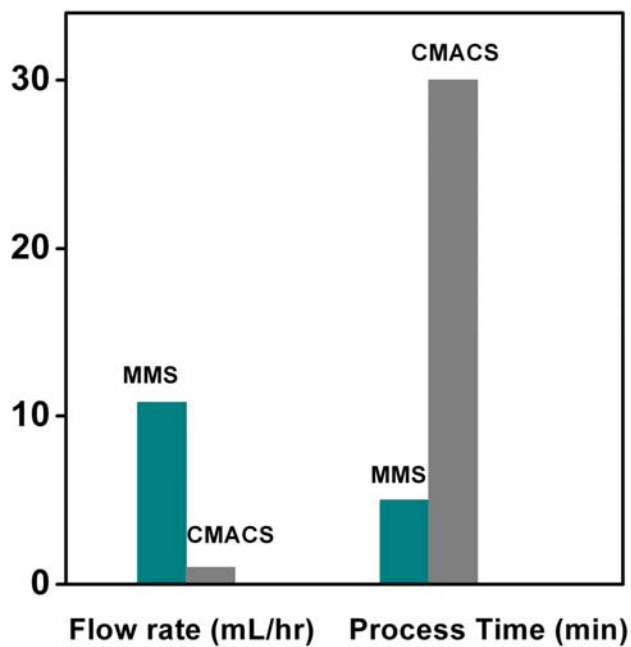


Figure S2: The MMS device allows higher throughput separation in a comparison to the CMACS device.

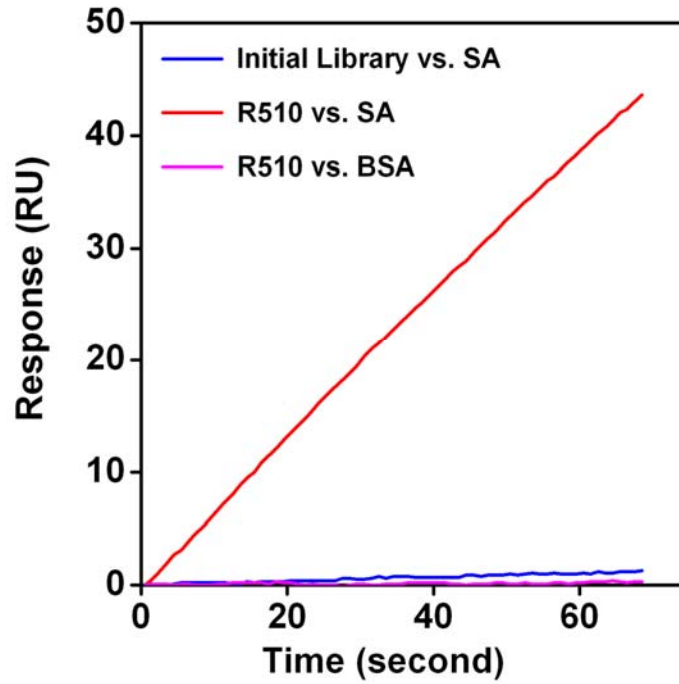


Figure S3. Surface Plasmon Resonance (SPR) sensorgrams of clone 10 binding to target (SA) and non-target (BSA) molecules. The SPR response confirms the specific affinity of clone 10 for SA and negligible affinity for BSA. The SA and BSA molecules were immobilized on individual SPR chips through EDC/NHS coupling, and 6 μL of 50 nM and 20 μL of 200 nM solution of clone 10 were injected for SA and BSA binding reaction, respectively.