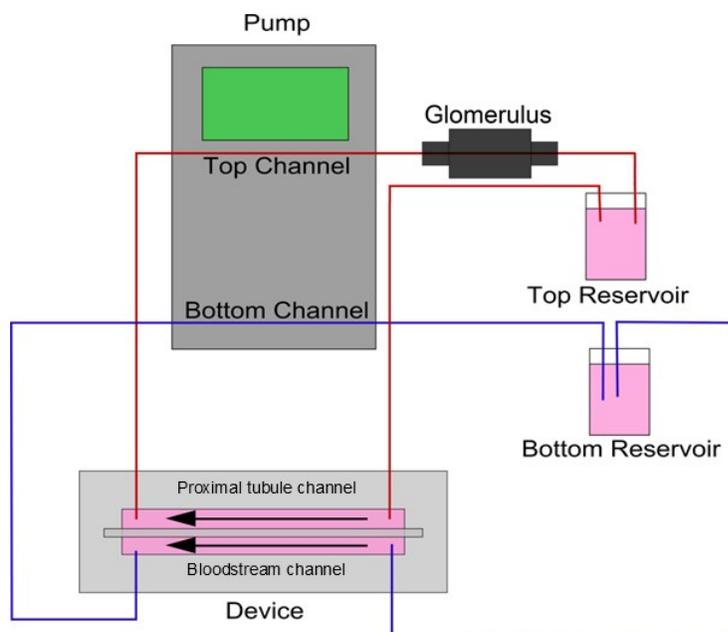
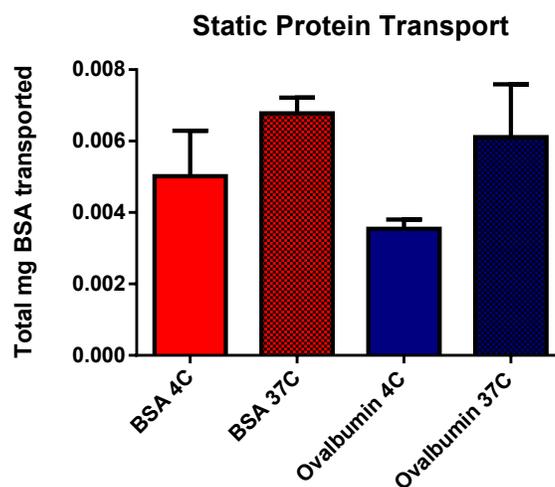


Supplemental Materials



Supplemental Fig. 1 Schematic diagram depicting multi-channel microfluidic device layout. Areas of interest are highlighted here, showing the organization of the glomerulus with the “proximal tubule” channel, as well as the independent “bloodstream” channel on the bottom.



Supplemental Fig 2 Results of static protein transport of fluorescently tagged BSA and ovalbumin. While slight increases occur between 4°C (passive transport) and 37°C (total transport; active and passive), indicating a degree of active transport in these cells, no statistical significance was observed.