



**Supplemental 1** Plot of data collected for 0  $\mu\text{M}$  streptavidin standard curve point using 18  $\mu\text{M}$  B4F. Data was obtained over 90 s with images captured at a rate of 2 Hz. Raw data demonstrates sharp fluctuations in fluorescence signal due to pulsatile flow, and the processed data depicts the subset of the raw data that was used for further analysis. Within the processed data, a mean fluorescence signal was calculated for each cycle. The grand mean of these average values was used for the standard curve as the final fluorescence value for 0  $\mu\text{M}$  streptavidin.