Rapid Quantification of Prion Proteins using Resistive Pulse Sensing

Matthew J. Healey, a Muttuswamy Sivakumaran, b and Mark Platt a,*

a Department of Chemistry, Loughborough University, Loughborough, Leicestershire, LE11 3TU, United Kingdom

b Peterborough City Hospital, Edith Cavell Campus, Bretton Gate, Peterborough, PE3 9GZ, United Kingdom

* Corresponding author: M. Platt: m.platt@lboro.ac.uk, +44(0)1509222573
Figure s1. Example data sets for DNA blank s-beads (green), s-beads incubated with 50 nM PrP\(^c\) (olive) and 100 nM PrP\(^c\) (red).
Figure s2. Box plot of blockage magnitude of SPBs with concentration of DNA aptamer equivalent to the 33%, 100% and without DNA aptamer shown in figure 2. Experiments were conducted in 1x PBS at 0.4 V and 48.9 mm stretch. n = 3 and events for each data set >500
Figure s3. Blockade magnitude distributions particles shown in figure 2b Black: 0 nM; Blue: at 50 nM and; Red: 100 nM. Events for each data set >500
Figure s4 Blockade magnitude distributions for the incubation of S-beads with three abundant blood proteins at 200 nM with a constant concentration of SPPs at $2 \times 10^9$ mL$^{-1}$. Red: albumin; Blue: fibrinogen; Green: IgG. n=3; events for each dataset >500.