Supplementary information

Pressure-driven sample flow through an electrospun membrane increases the analyte adsorption

In the experiments with BSA adsorption, we used the BSA-Cy3 conjugates as the analyte and relied on the Cy3 fluorescence to measure the concentration. A calibration curve was obtained in every experiment, and a typical calibration curve is shown in **Figure S1**

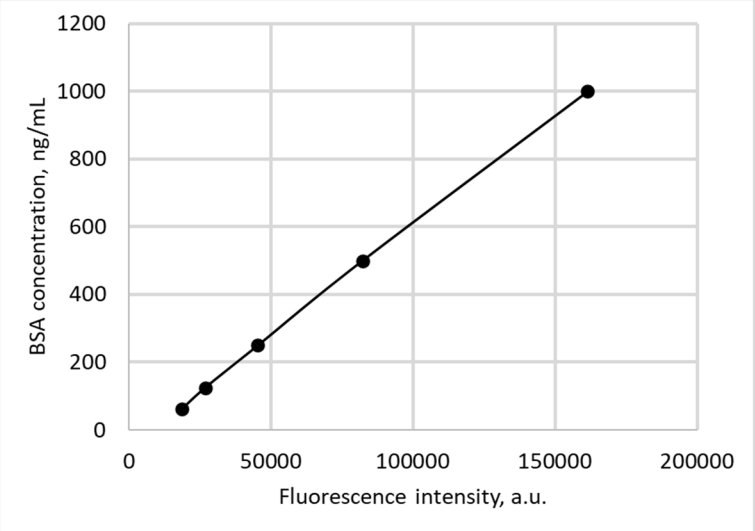

Figure S1 - A typical calibration curve obtained in the experiment on the adsorption of BSA onto the PDO membranes.

Table S1 - The list of peaks in the FTIR spectrum of PDO

Wave number (cm^{-1})	Identification of peaks
3400 - 3700	O–H stretching vibrations
2959	stretching vibrations in $–CH_2–$ group
2923	
2880	
1734	C=O stretching vibration
1431	bending vibration of $–CH_2–$ group
1269	C–O stretching vibrations
1051	
1201	C–O–C asymmetric stretching vibrations
1127	
1069	
930	C–O–C symmetric stretching vibrations
873	

850	
724	plane vibration of $-CH_2-$ group
1289, 1237, 1003, and 582	Undefined fingerprints peak

The measurements of the BSA concentration upon adsorption yielded data as shown in **Figure S2**. They were used to calculate the fraction of the adsorbed BSA, as described in the main text.

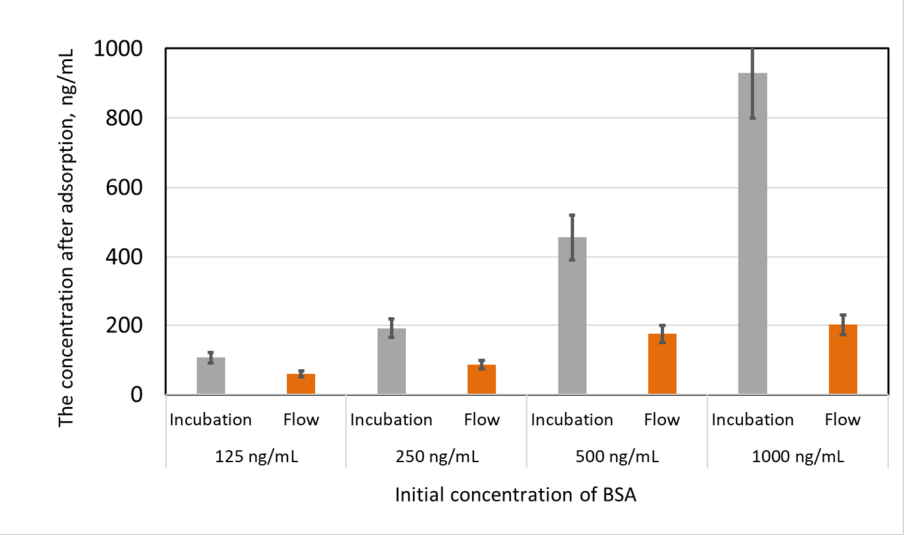

Figure S2 – Concentrations of BSA after the adsorption onto the PDO membranes.

When IL1b concentration was measured, we used conventional ELISA using reagents purchased from Cloud-Clone (China). A typical calibration curve obtained in such an experiment is shown in **Figure S3**.

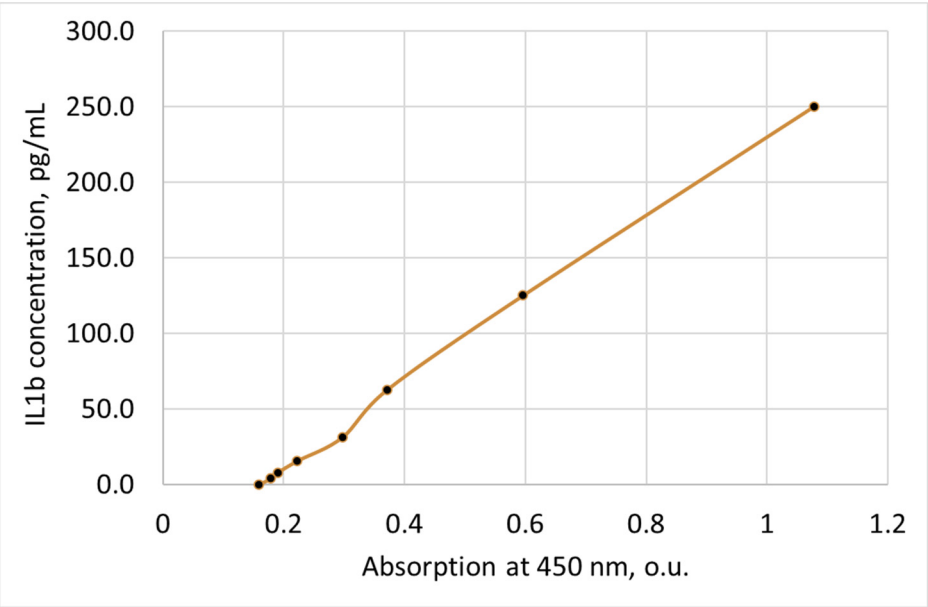

Figure S3 - A typical calibration curve used to measure the concentration of IL1b after the adsorption.