Electronic Supplementary Material (ESI) for Analyst.

Supplementary Information for:

Immunoaffinity Monoliths for Multiplexed Extraction of Preterm Birth Biomarkers from Human Blood Serum in 3D Printed Microfluidic Devices

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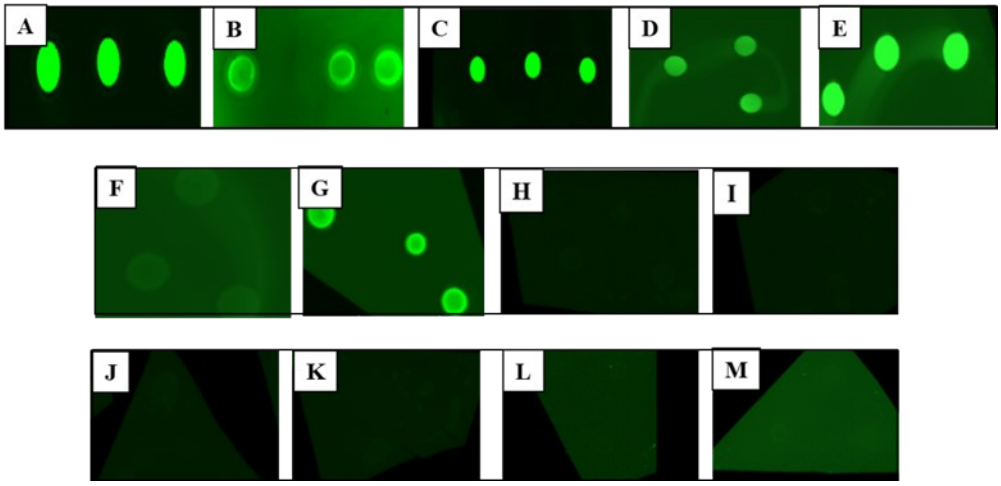

Figure S1. Dot blot assays on nitrocellulose membranes. Three replicate 2 µL dots of (A) positive control with ferritin and anti-ferritin; (B) CRF and anti-CRF; (C) TNF and anti-TNF; (D) TAT and anti-TAT; (E) thrombin and anti-TAT; (F) antithrombin and anti-TAT; (G) Thrombin and anti-ferritin. (H) CRF and anti-TNF; (I) CRF and anti-TAT; (J) TAT and anti-TNF; (K) TAT and anti-CRF; (L) TNF and anti-TAT; (M) TNF and anti-CRF.

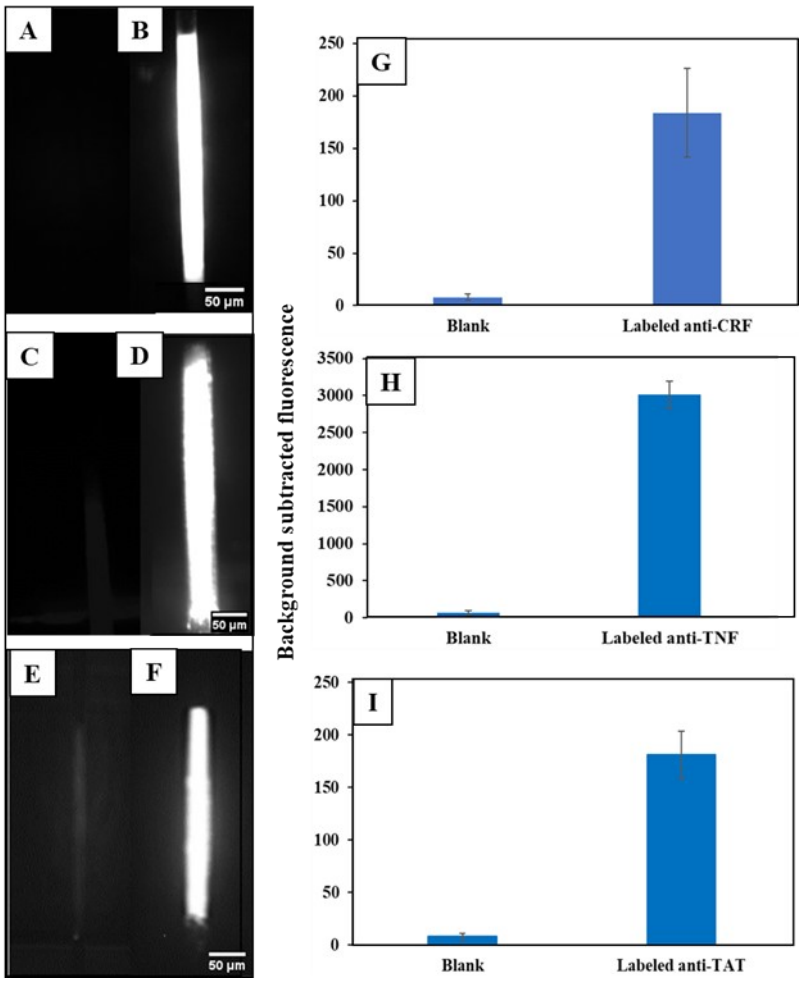

Figure S2. Labeled antibody attachment to monoliths. Fluorescence images of (A, C, E) control monoliths and fluorescently labeled monoclonal (B) anti-CRF, (D) anti-TNF, and (F) anti-TAT. Background-subtracted fluorescence of the monoliths before and after immobilization of labeled (G) anti-CRF, (H) anti-TNF, and (I) anti-TAT. Error bars show the standard deviation for three replicates.

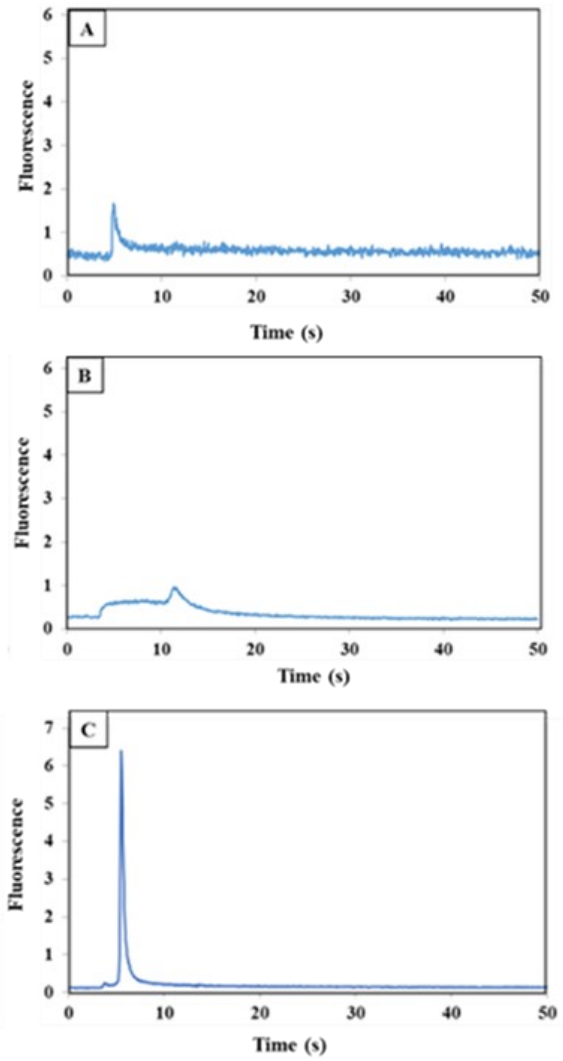

Figure S3 Fluorescence during elution after extraction of labeled (A) 30 nM TNF, (B) 60 nM TAT and (C) TNF (30 nM) and TAT (60 nM) from spiked diluted serum using a control monolith lacking attached antibodies (blue).