Supplementary Materials

Micro–Volume Blood Separation Membrane for In–Situ Biosensing

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Table S1 The influences of different temperatures, the concentrations of CA, and types of solvent to diffusion distances.

Samples	Temperature (℃)	Solvent	Diffusion Distances (mm)
6% CA+6% PEG−2000	25	water	0
7% CA	25	water	1.5
7%CA+6%PEG−2000	15	water	2
7%CA+6%PEG−2000	20	water	3.1
7%CA+6%PEG−2000	25	water	4.5
7%CA+6%PEG−2000	35	water	4
7%CA+6%PEG−2000	45	water	2.3
7%CA+6%PEG−2000	25	Methanol :water 2:8	2
7%CA+6%PEG−2000	25	Methanol :water 3:7	0
7%CA+6%PEG−2000	25	Methanol :water 4:6	0

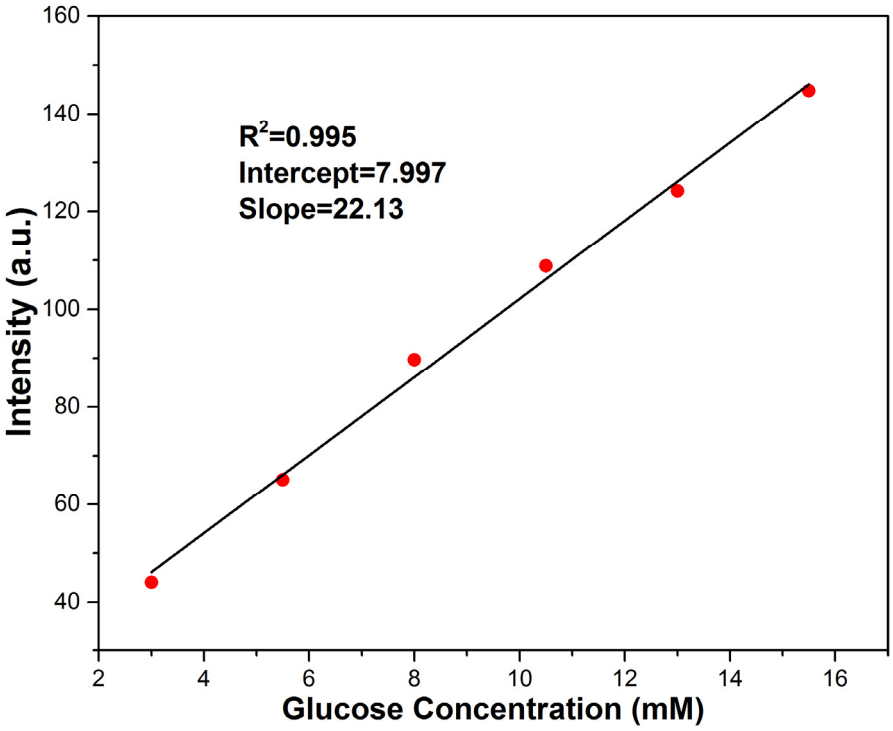

Figure S1. Linear calibration plot of the chromogenic intensity vs. glucose concentration using Image J software.

Table S2. Performance comparison between our testing strip and other passive devices for plasma separation.

References	Methods	Whole blood Volume	Separation Rate	Time(Process Rate)
[1]	Membrane filter	45 μl	60%	72 sec
[2]	Membrane filter	1.8 ml	28.6%–31%	
[3]	Membrane filter	250 μl	53.8%	10 min
[4]	Membrane filter	60 ml	71.7	6 min
[5]	microfluidic device	100 μl	20%–22%	10 min
[6]	microchip	200 μl	65%	25 min
This work	Membrane filter	5 μl	68.7%–75%	2 min

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