

Supplementary Information

Chaperone Polymer-Enhanced MicroRNA Sensing on a Surface-Functionalised Power-Free Microchip

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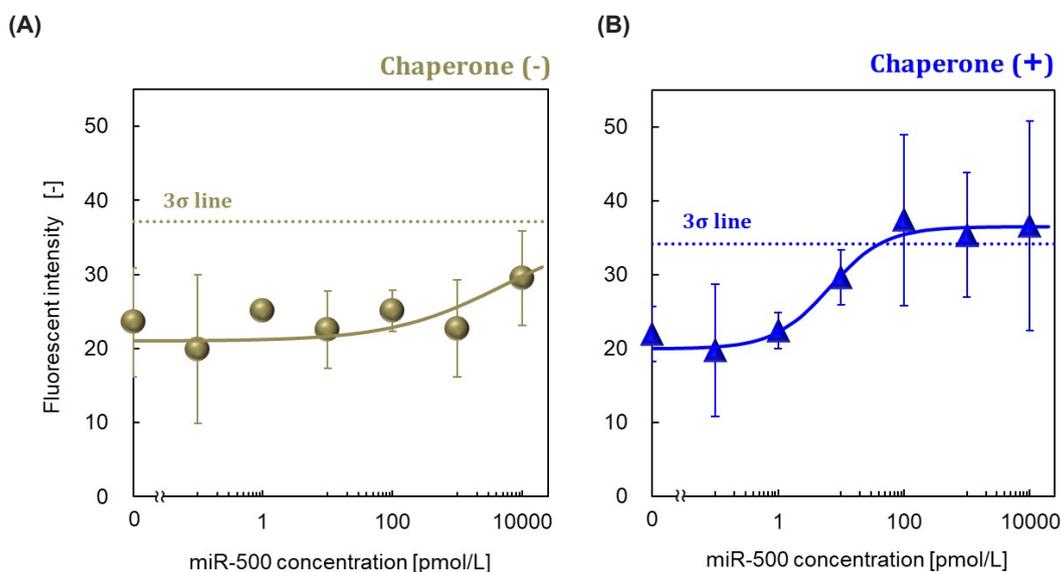


Fig. S1 Chaperone polymer-mediated enhancement of microRNA detection sensitivity on the SF-PF microchip. Experimental conditions for the SF-PF microchip fabrication: (X, Y, Z) = (3 μ L, 2.0 mol/L, 20wt%). Calibration curves without the chaperone polymer (A, -) and with it (B, +). Detection of miR-500 under conditions where the total concentration of miR-500 and miR-21 was fixed at 10 nmol/L. miR-500 and miR-21 were used as the target and non-target miRNAs, respectively. Data are presented as mean \pm standard deviation ($n \geq 3$).

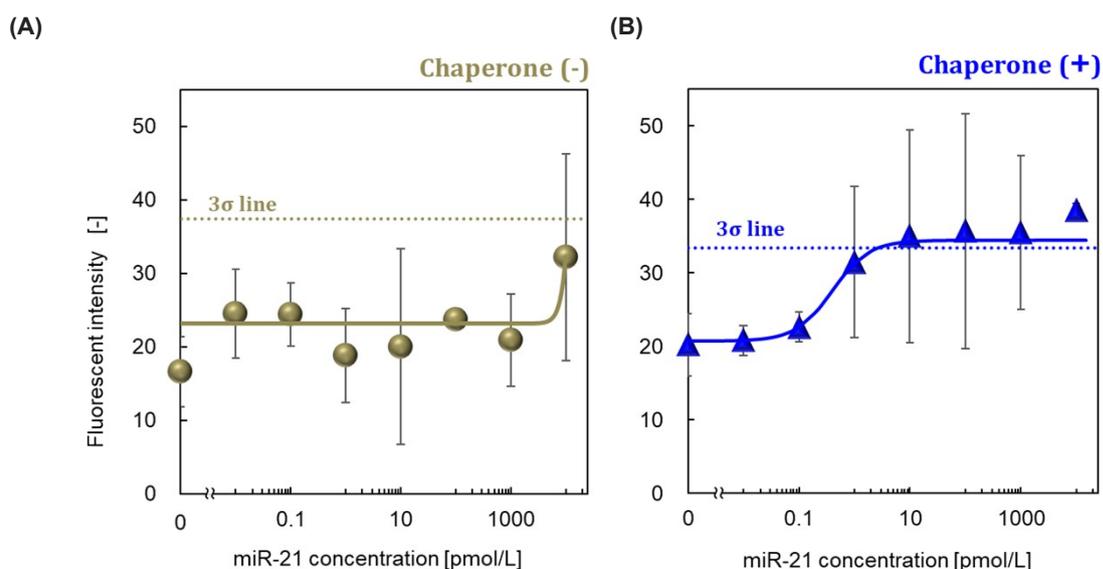


Fig. S2 Chaperone polymer-mediated enhancement of microRNA detection sensitivity on the SF-PF microchip. Experimental conditions for the SF-PF microchip fabrication: (X, Y, Z) = (3 μ L, 2.0 mol/L, 20wt%). Calibration curves without the chaperone polymer (A, -) and with it (B, +). Detection of miR-21 under reversed target conditions, where miR-21 and miR-500 were used as the target and non-target miRNAs, respectively. The total RNA concentration was fixed at 10 nmol/L. Data are presented as mean \pm standard deviation ($n \geq 3$).