

Electronic Supplementary Information

A compact fiber-integrated optofluidic platform for highly specific microRNA Förster resonance energy transfer detection

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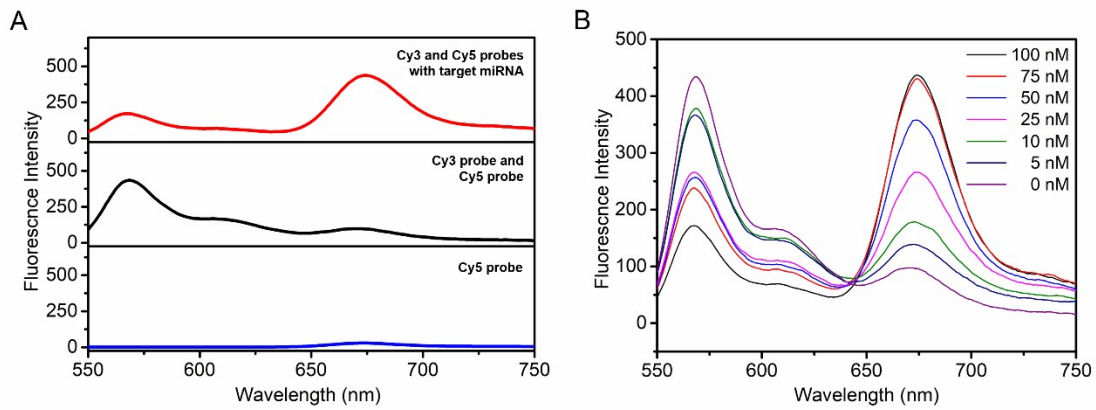


Figure S1. (A) Fluorescence spectral responses of Cy5-linked probe (blue), a mixture of Cy3-linked probe and Cy5-linked probe (black), a mixture of Cy3-linked probe and Cy5-linked probe with target miRNA (red). The concentration of each oligonucleotide is 100 nM. (B) Fluorescence spectra on the energy transfer from Cy3 to Cy5 as a function of miRNA concentration. The concentration of each probe is 100 nM.

Table S1. Sequences of the oligonucleotides

Name	Sequence (5'-3')
miR208 a	AUA AGA CGA GCA AAA AGC UUG U
miR208 b	AUA AGA CGA ACA AAA GGU UUG U
miR-195	UAG CAG CAC AGA AAU AUU GGC
miR-155	UUA AUG CUA AUC GUG AUA GGG GU
miR-183	GUG AAU UAC CGA AGG GCC AUA A
Probe1	ACA AGC TTT TTT TTG ATC-Cy3
Probe2	AAA AGA TCA(Cy5) AAG CTC GTC TTA T
Probe3	Cy3-ACA AGC TTT TTT TTG ATC
Probe4	AAA AGA TCA AAG CTC GTC TTA T-Cy5

Isomers:

Configuration 1: (probes 1 and 2)

Configuration 2: (probes 3 and 2)

Configuration 3: (probes 3 and 4)