

Supporting Information

A spherical poly(acrylic acid) brush-enzymes block with high catalytic capacity for signal amplification in digital biological assays

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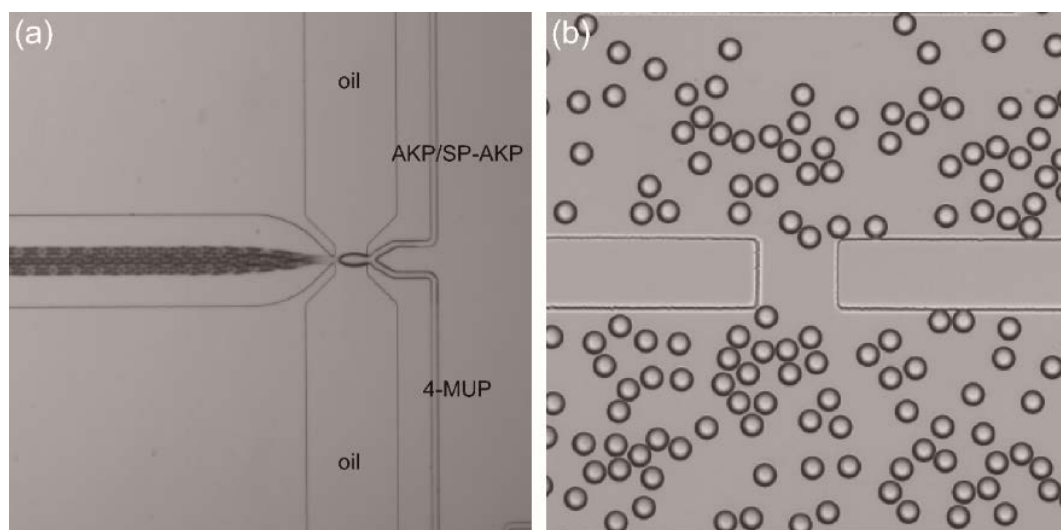


Figure S1. (a) The generation (two water phase and two oil phases, 4 times magnification) and (b) the storage state (10 times magnification) of the droplets in the bright field.

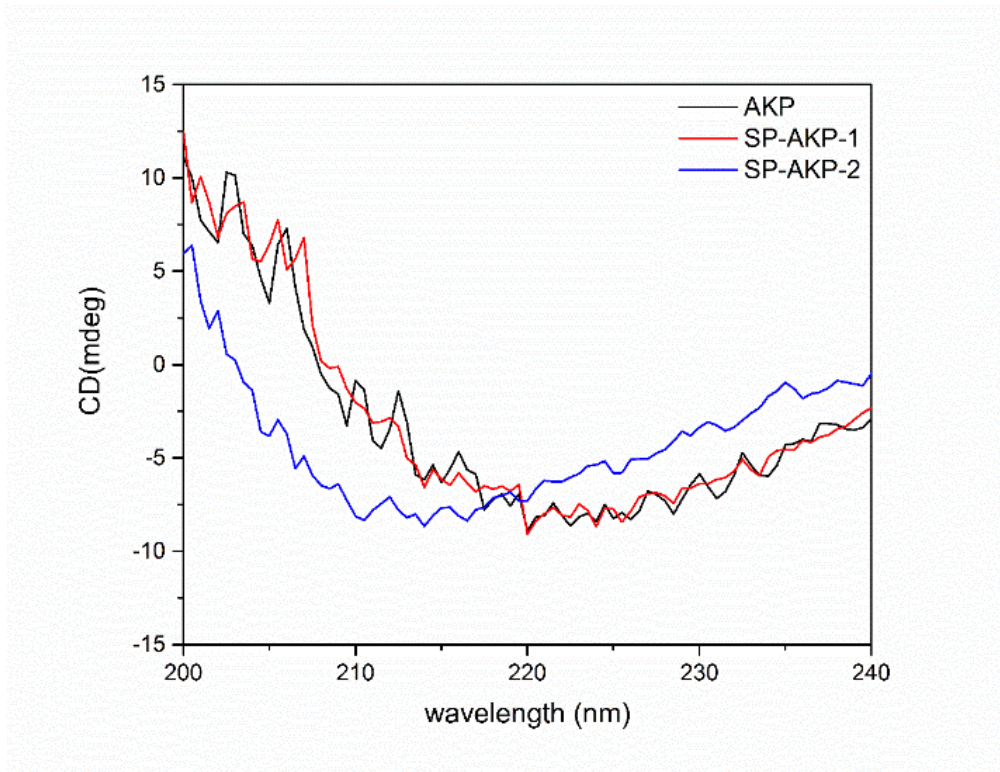


Figure S2. The circular dichroism (CD) spectra of free AKP, SP-AKP-1 (by Electrostatic adsorbed), SP-AKP-2 (by CCEE method).

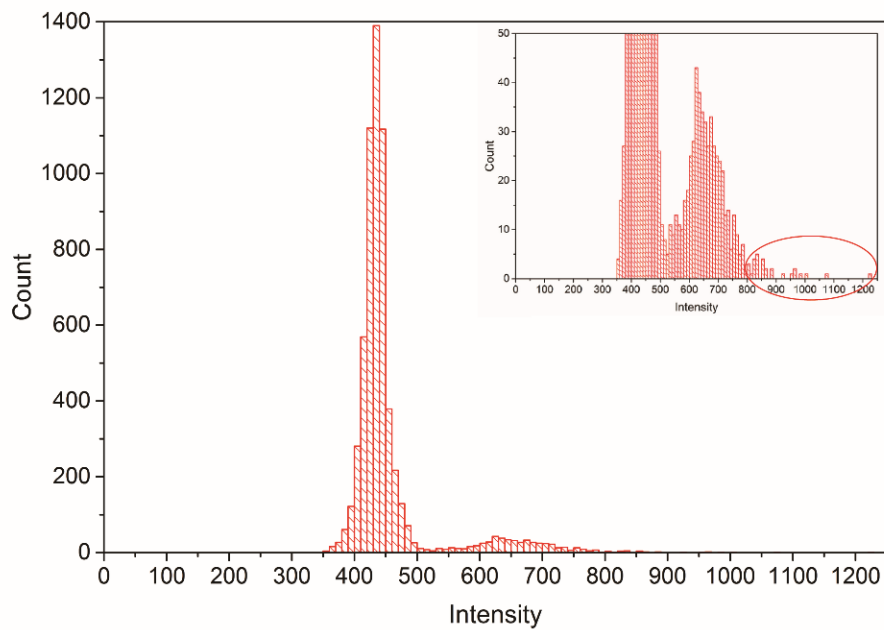


Figure S3. Statistical diagram of fluorescence intensity distribution of SP-AKP (the plot shown in the inset is an expanded view to show the presence of low number of droplets with high intensities).

Table S1. Number and mean fluorescence intensity of droplets.

	X=0	X=1	X \geq 2
Number	5550	517	29
Mean FL intensity ^a	434.09	653.28	886.31
P(X)	91.04%	8.48%	0.48%
The actual λ	0.0939		

^a Grey value, measured by Metamorph image analysis software.