

## Supplementary Information

# Protein Nanofiber Hydrogel for Sensitive Immunoassays

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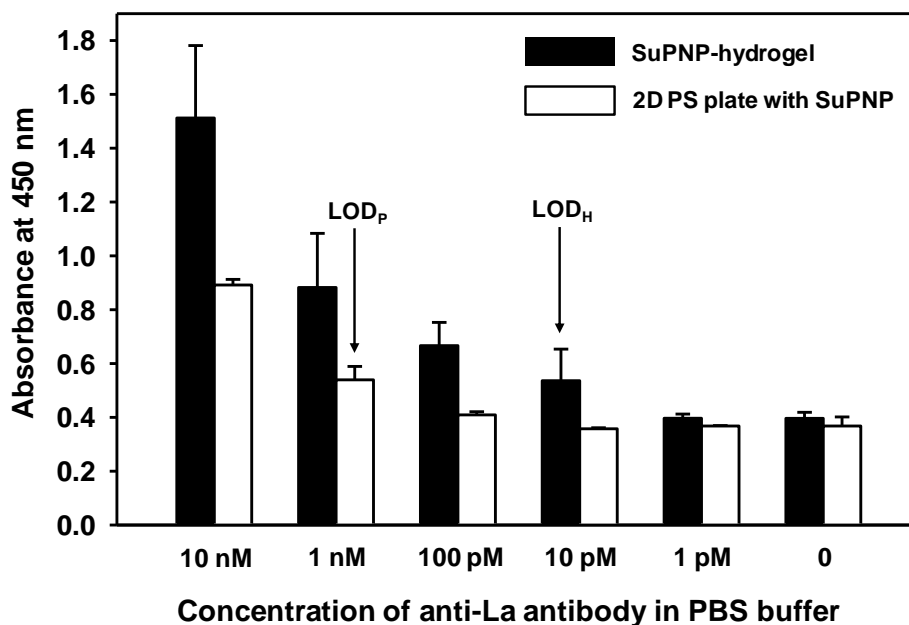
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**Supplementary Table 1.** Results of preliminary analyses to determine an optimum concentration of protein nanofiber in the preparation of SuPNP-hydrogel.

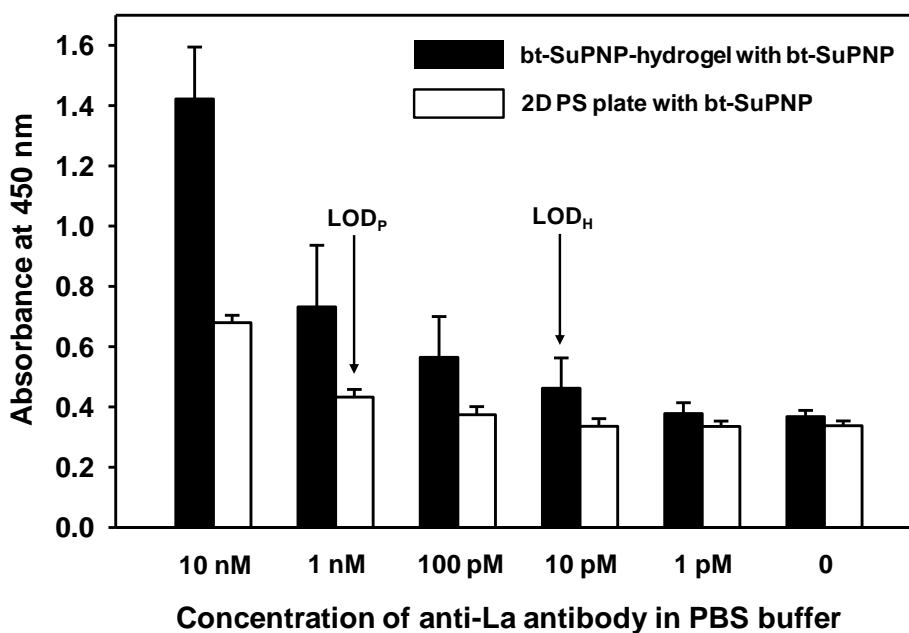
Protein nanofiber concentration in hydrogel ( $\mu\text{g}/\mu\text{l}$ )	Assay results of human sera (fluorescence*)		
	Signal mean from SS patient serum test (positive signal mean)	Signal mean from healthy serum test (negative signal mean)	Ratio of positive to negative signal
0.1	30760	14394	2.14
0.2	34580	15614	2.21
0.3	31326	19601	1.60
0.4	Gelation speed is too fast, and therefore the hydrogel formation is not under control.		

\* In this analysis, we used anti-human secondary antibodies conjugated with quantum dot as the reporter probe because the non-specific binding of healthy serum antibodies to protein nanofiber probes, if any, can be immediately detected with fluorescence signal without additional step of enzyme (HRP)-substrate (TMB) reaction.

**Supplementary Figure 1.** The same figure as Figure 3b in main article. (This figure was plotted based on the measured actual absorbance.)



**Supplementary Figure 2.** The same figure as Figure 5b in main article. (This figure was plotted based on the measured actual absorbance.)



**Supplementary Figure 3.** The same figure as Figure 6 in main article. (This figure was plotted based on the measured actual absorbance.)

