Supplementary Material for

Chemiluminescent Optical Fiber Immunosensor Combining Surface Modification and Signal Amplification for Ultrasensitive Determination of Hepatitis B Antigen

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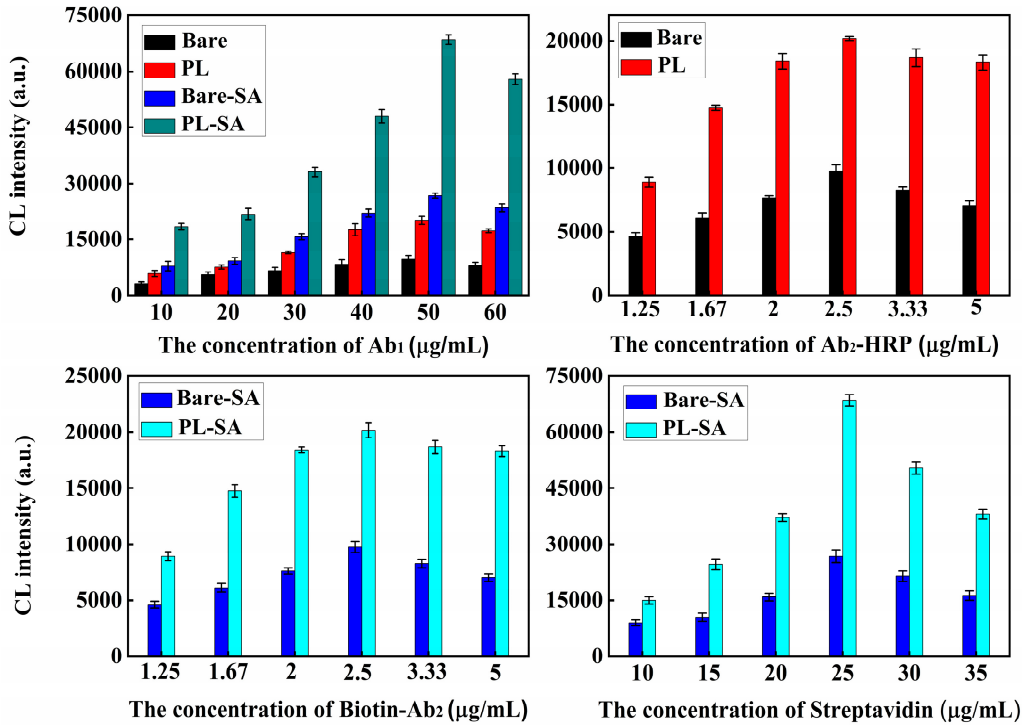

Figure S1. The effects of assay conditions on the responses of different sensors for detection of HBeAg.

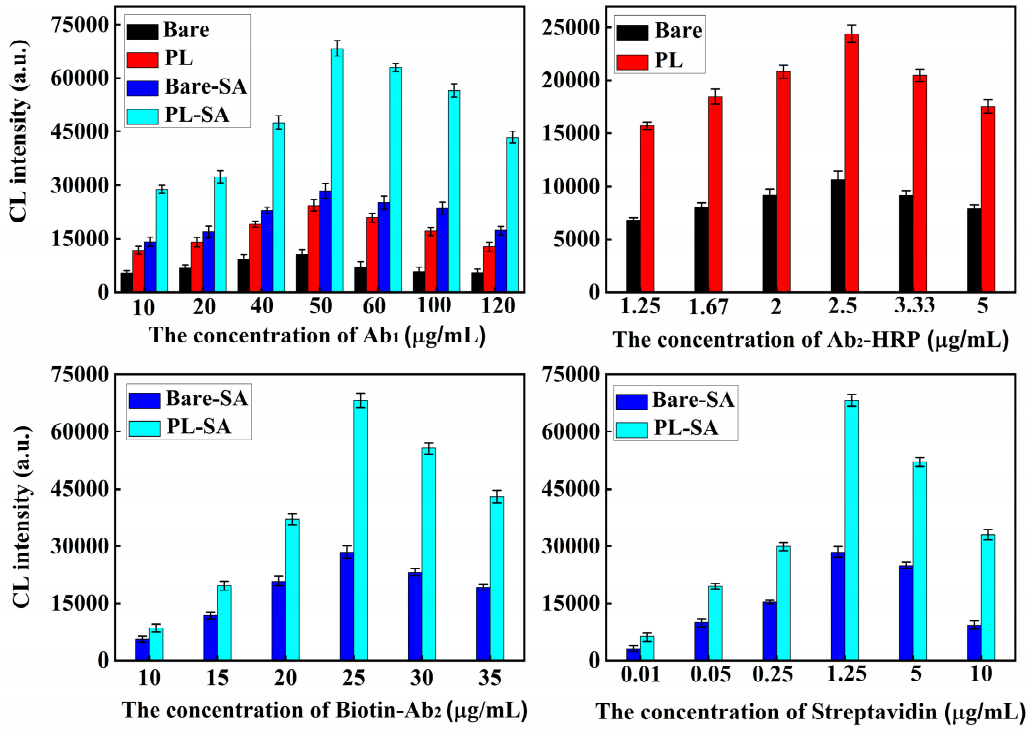

Figure S2. The effects of assay conditions on the responses of different sensors for detection of HBsAg.

Table S1. Detection of HBeAg in serum samples using the PL-SA-sensors and Roche-ECL.

Sample	Assay results[a]	RSD (n=3)[a]	Roche-ECL[b]	Relative error[c]
number	(ng/mL)	(%)	(ng/mL)	(%)
1	0.023	11.3	0.03	-2.3
2	0.063	8.4	0.06	6.6
3	0.145	7.3	0.13	11.5
4	0.214	12.4	0.22	-2.7
5	0.853	9.8	0.97	-12.1
6	2.335	6.1	2.42	-3.5
7	3.967	2.7	3.87	2.5
8	5.418	5.2	5.32	1.8

[a] assay using PL-SA-sensors.

[b] independently measured by clinical laboratory of hospitals.

[c] the difference of the assay and clinical results divided by the clinical results.

Table S2. Detection of HBsAg in serum samples using the PL-SA-sensors and Roche-ECL.

Sample number	**Assay results**[a] (ng/mL)	**RSD (n=3)**[a] (%)	**Roche-ECL**[b] (ng/mL)	**Relative error**[c] (%)
1	0.0098	14.2	0.01	-2.0
2	0.038	10.4	0.04	-5.0
3	0.150	2.8	0.13	15.4
4	0.185	3.9	0.19	-2.6
5	0.593	9.3	0.58	2.2
6	2.380	7.9	2.15	10.7
7	3.186	15.5	3.24	-5.4
8	6.120	10.2	5.93	3.2

[a] assay using PL-SA-sensors.

[b] independently measured by clinical laboratory of hospitals.

[c] the difference of the assay and clinical results divided by the clinical results.