

Supplementary Materials: Development of an Immunochromatographic Strip Test for the Rapid Detection of Alternariol Monomethyl Ether in Fruit

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Optimal monoclonal antibodies concentration for conjugation with colloidal gold nanoparticles.

Table S1. The optimal monoclonal antibodies concentration by visual observation.

Number	Colloidal Gold (μL)	Anti-AME mAb (μg)	Tris-HCl (pH 8.0) (μL)	10% NaCl (μL)	Color
1	1000	0	100	100	blue-black
2	1000	0.5	99	100	blue-black
3	1000	1	98	100	blue-black
4	1000	2	96	100	blue-violet
5	1000	4	92	100	purplish red
6	1000	6 *	88	100	red
7	1000	8	84	100	red
8	1000	10	80	100	red
9	1000	12	76	100	red

* Shows optimal monoclonal antibodies concentration.

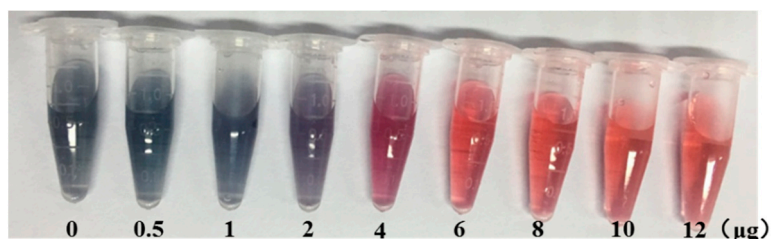


Figure S1. Determination of the optimal monoclonal antibodies concentration by visual observation. Six micrograms of monoclonal antibodies per 1 mL of colloidal gold was chosen as the minimal amount. The optimal concentration monoclonal antibodies was 7.8 $\mu\text{g}/\text{mL}$ colloidal gold (i.e. 20 % excess of the minimal amount).

Table S2. The optimal pH value determination of colloidal gold by visual inspection.

Number	Colloidal Gold (μL)	Anti-AME mAb (μg)	pH Vaules	10%NaCl (μL)	Color
1	500	3	6.5	50	red
2	500	3	7.0	50	red
3	500	3	7.5	50	red
4	500	3	8.0 *	50	red
5	500	3	8.5	50	purplish red
6	500	3	9.0	50	purplish red
7	500	3	9.5	50	purplish red
8	500	3	10	50	purplish red

* Shows optimal pH value of colloidal gold.

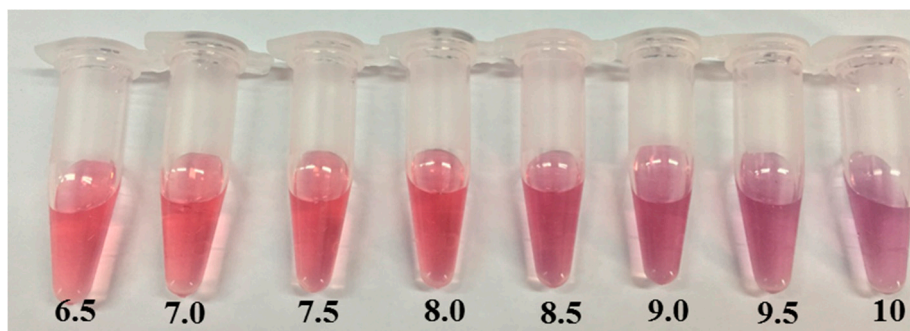


Figure S2. The optimal pH value determination of colloidal gold by visual observation. A pH of 8.0 was the optimal value for conjugation of monoclonal antibodies with colloidal gold nanoparticles.