

## ***Supporting Information***

### **Development of a colloidal gold immunochromatographic test strip for rapid detection of iprodione**

Huimin Deng,<sup>a</sup> Dan Chen,<sup>b</sup> Xiangyang Li,<sup>c</sup> Fei Yang,<sup>a</sup> Shanshan Liu,<sup>a</sup> Yingying Sun,<sup>a</sup>

Mowen Shi,<sup>a</sup> Zhaoyang Bian,<sup>a</sup> Gangling Tang,<sup>a\*</sup> Ziyan Fan<sup>a\*</sup>

<sup>1</sup>China National Tobacco Quality Supervision and Test Center, Zhengzhou 450001,  
China

<sup>2</sup>Yunnan Institute of Tobacco Quality Inspection & Supervision, Kunming, 650106,  
China

<sup>3</sup>China Tobacco Yunan Imp. & Exp. Co., Ltd., Kunming, 650031, China

\*Corresponding authors, E-mail addresses: tglcttc@163.com (G. Tang),  
fanzycqtc@163.com (Z. Fan)

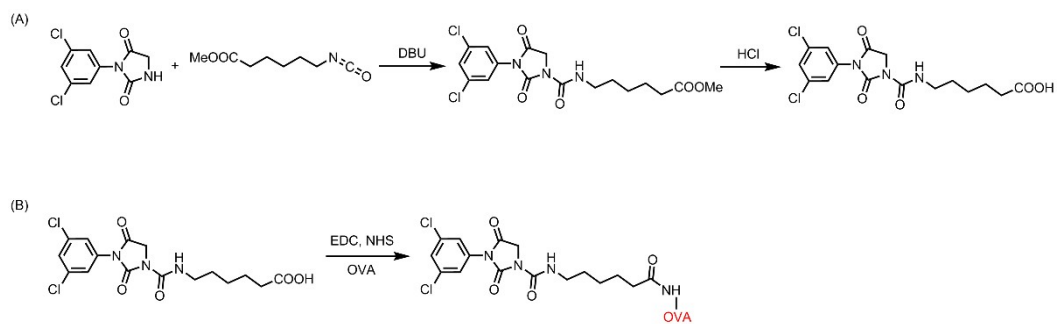


Figure S1. Synthetic route of IPR-OVA.

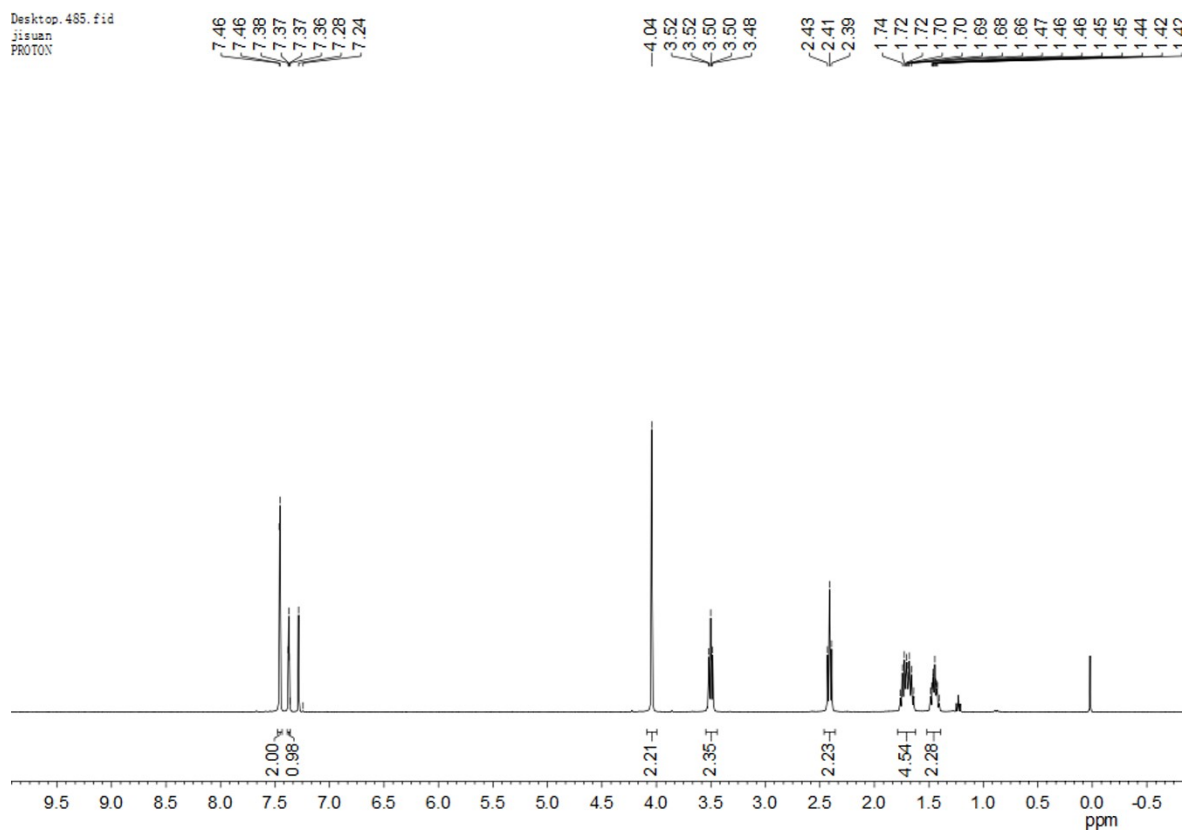
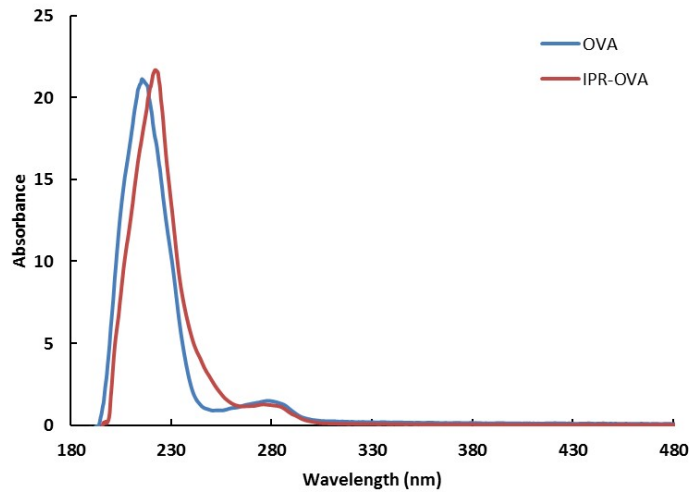
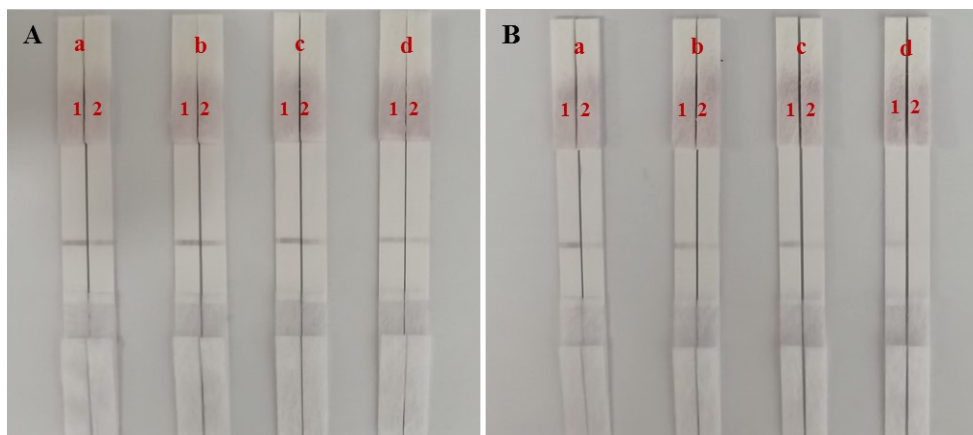


Figure S2. <sup>1</sup>H-NMR spectrum of the synthesized IPR hapten.



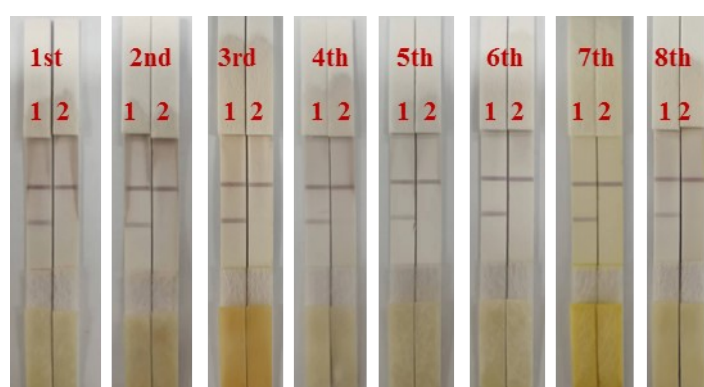
**Figure S3.** UV-vis characterization of OVA and IPR-OVA.



**Figure S4.** Responses of blank PBST (1) and PBST containing 50 ng/mL IPR (2) on the test strips coated with two different antigens. T line: 0.5 mg/mL IPR-BSA (A) and 0.5 mg/mL IPR-OVA (B). C line was not coated. The amount of mAb was 10  $\mu$ g (a), 8  $\mu$ g (b), 6  $\mu$ g (c), and 4  $\mu$ g (d), respectively.



**Figure S5.** Magnified screening results of naturally tobacco samples.



**Figure S6.** Evaluation of long-term storage stability of the test strip for 8 successive weeks. Tobacco matrix-matched negative (1) and positive (50 ng/mL IPR) (2) samples.