

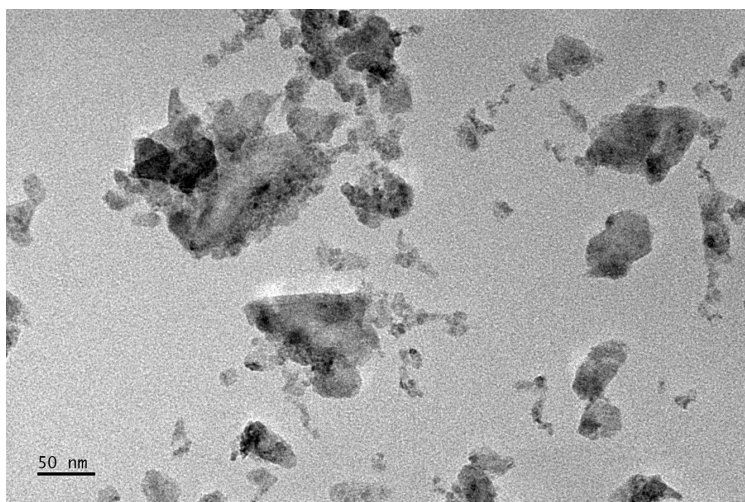
Supporting Information

**Fluorescence Aptamer Sensor Utilizing WS<sub>2</sub> Nanosheets  
for Sensitive Detection of Patulin: Enhanced Specificity  
and Wide Applicability**

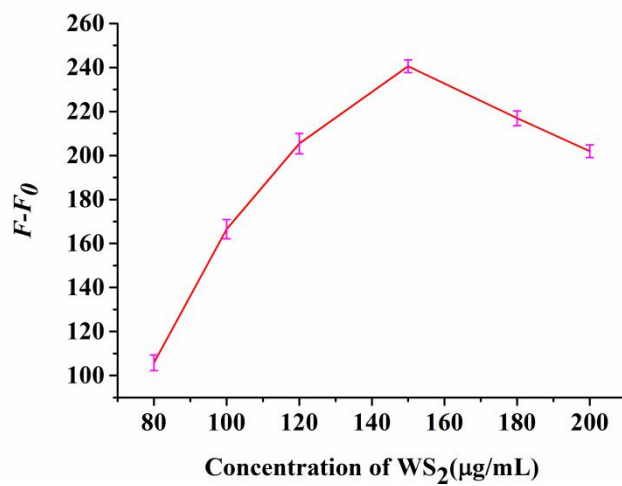
Guoxin Qin, Huiling Li, Jie He, Haijun Wang, Yongxian Chen, Shuibing Lao,  
Liang Cheng, Weifan Lu, Lihong Luo, Li Tang, Renfu Mo, Yuning Wei\* and  
Qifeng Zhou\*

*Institute for Agricultural Product Quality Safety and Testing Technology,  
Guangxi Academy of Agricultural Sciences, Nanning 530007, China.*

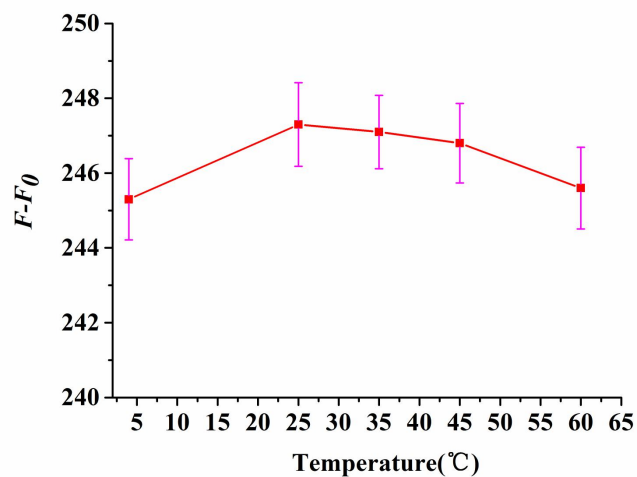
\* *E-mail: 262655017@qq.com; zhouqifeng623@163.com*



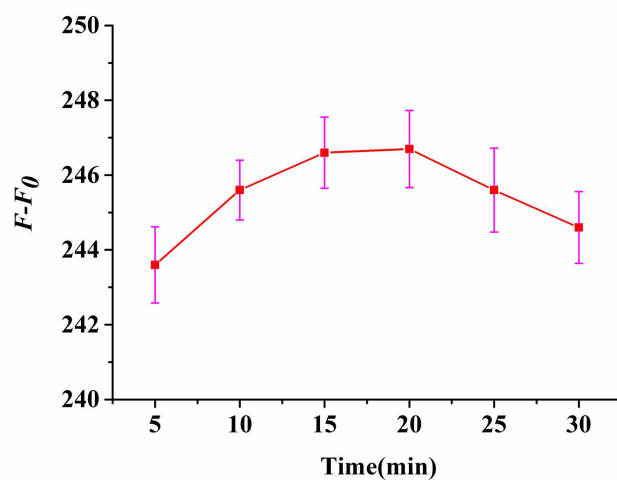
**Figure S1.** TEM image of the used WS<sub>2</sub> nanosheet.



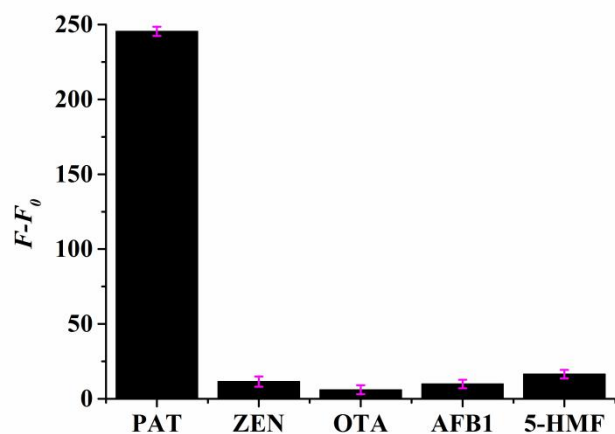
**Figure S2.** Effects of the amount of WS<sub>2</sub> on FL intensity. Other experimental conditions were the same as those given in Figure 3.



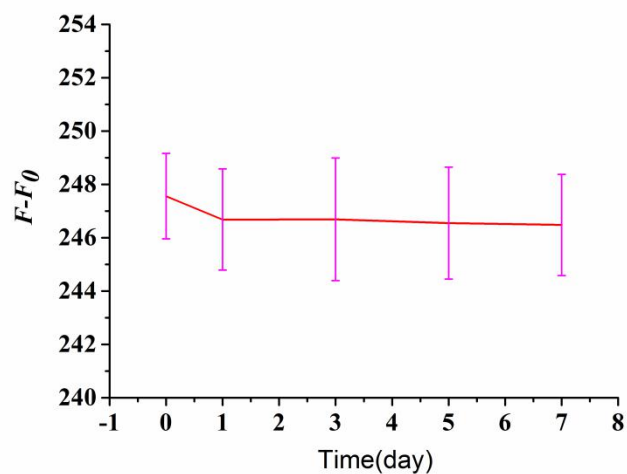
**Figure S3.** Effects of the binding temperature of Cy3-PAT aptamer to WS<sub>2</sub> nanosheet on FL intensity. Other experimental conditions were the same as those given in Figure 3.



**Figure S4.** The effect of the binding time of Cy3-PAT aptamer to WS<sub>2</sub> nanosheet on the FL quenching. Other experimental conditions were the same as those given in Figure 3.



**Figure S5.** Detection specificity of the proposed FL aptamer sensor. Other experimental conditions were the same as those given in Figure 3.



**Figure S6.** The durability of the FL aptamer sensor. Other experimental conditions were the same as those given in Figure 3.