

## Supporting information for

### **Magnetic Beads Carrying Poly(Acrylic Acid) Brushes as “Nanobody Containers”**

#### **for Immunoaffinity Purification of Aflatoxin B<sub>1</sub> from Corn Samples**

Ying Xiong,<sup>†,‡</sup> Zhui Tu,<sup>†</sup> Xiaolin Huang,<sup>†</sup> Bing Xie,<sup>§</sup> Yonghua Xiong,<sup>\* †,‡</sup> Yang Xu<sup>†,‡</sup>

<sup>†</sup>State Key Laboratory of Food Science and Technology, Nanchang University,  
Nanchang 330047, P. R. China

<sup>‡</sup>Jiangxi-OAI Joint Research Institute, Nanchang University, Nanchang 330047, P. R.  
China

<sup>§</sup>Centre of Analysis and Test, Nanchang University, Nanchang 330047, P. R. China

\*Correspondence to:

#### **Dr. Yonghua Xiong**

State Key Laboratory of Food Science and Technology, and Jiangxi-OAI Joint  
Research Institute, Nanchang University

Address: 235 Nanjing East Road, Nanchang 330047, P.R. China

Phone: +0086-791-8833-4578. Fax: +0086-791-8833-3708.

E-mail: yhxiongchen@163.com.

Figure 1S. The SDS-PAGE of anti-AFB<sub>1</sub> Nbs expression in Rosetta (DE3) *E. coli* strain. a: the total protein of culture cells, b: the supernatant of cell broken solution, c: the unbound protein with KBsphere<sup>TM</sup> Ni-IDA column, d: the purified anti-AFB<sub>1</sub> Nbs.

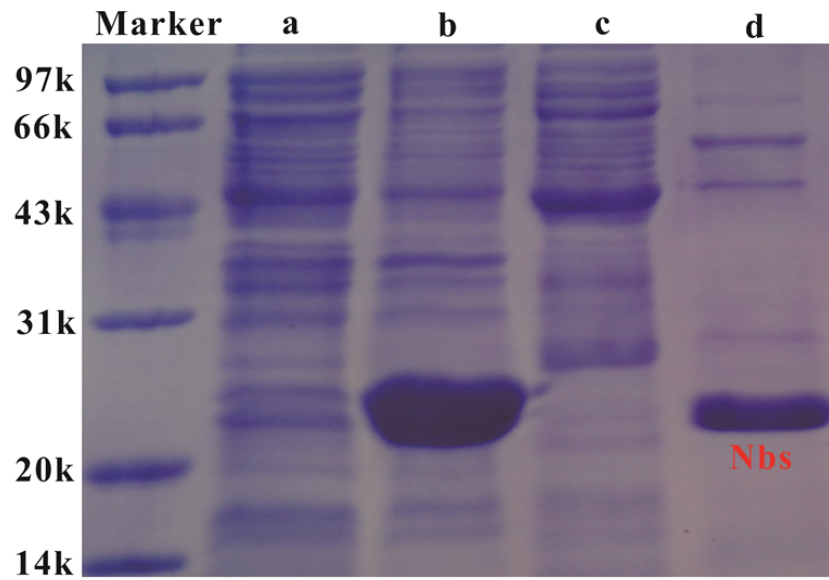


Figure 1S. Xiong *et al.*

Figure 2S. Optimization of methanol concentration for AFB<sub>1</sub> elution: The experiments were performed by adding 10 ng of AFB<sub>1</sub> in 0.5 mL methanol-PBS solution with 0.1 mg MB@PAA@Nbs.

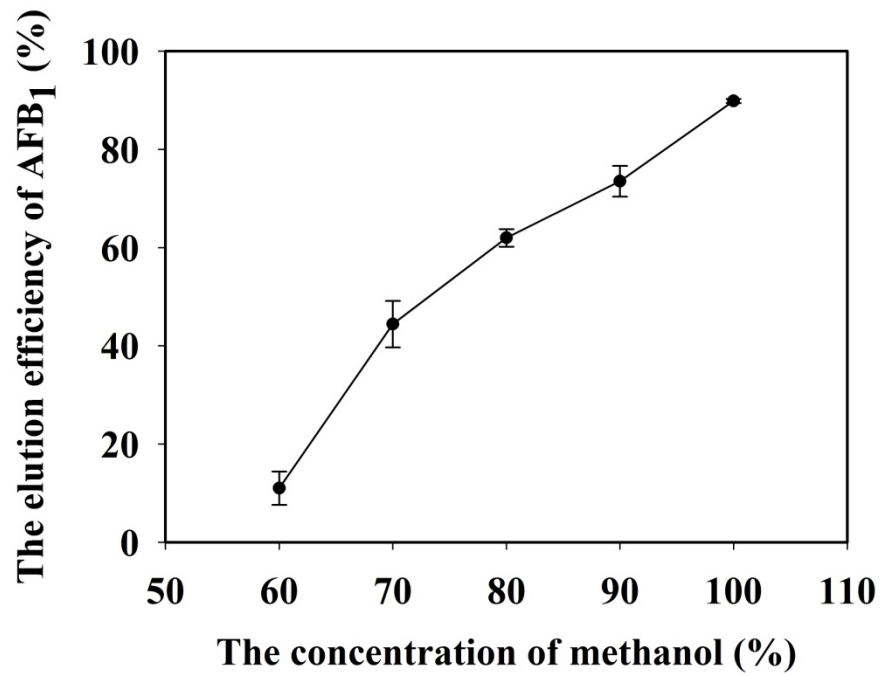


Figure 2S. Xiong *et al.*