

## Supporting information for

# Development of a nanobody-alkaline phosphatase fusion protein and its application in a highly sensitive direct competitive fluorescence enzyme immunoassay for detection of ochratoxin A in cereal

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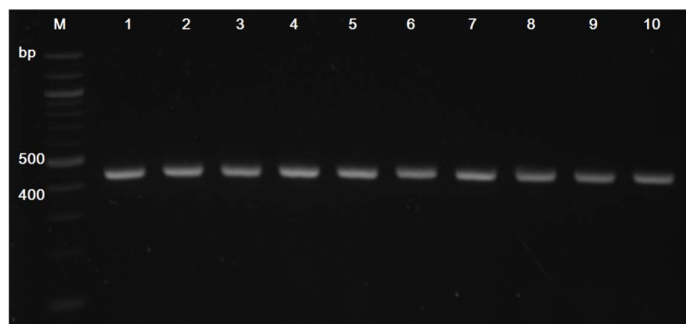


Figure S-1. Colony PCR analysis of recombinant plasmid pecan45-Nb28-AP. Lane M, 100 bp DNA ladder; Lane 1-10, colony PCR products of ten single transformed colonies randomly picked from the Luria-Bertani (LB)-agar plates containing 50  $\mu\text{g}/\text{mL}$  carbenicillin. Each PCR reaction (20  $\mu\text{L}$ ) consisted of 10  $\times$  high fidelity PCR buffer, 10 mM dNTP mixture, 50 mM  $\text{MgSO}_4$ , 10  $\mu\text{M}$  of primer AP-F and AP-R, transformed bacteria, platinum Taq high fidelity, and sterilized water. PCR was carried out as follows: 94  $^\circ\text{C}$  for 2 min, followed by 30 cycles of 94  $^\circ\text{C}$  for 30 s, 55  $^\circ\text{C}$  for 30 s, and 68  $^\circ\text{C}$  for 1 min. The 433-bp target DNA was confirmed by agarose gel electrophoresis.

Table S-1. Sequence of primer

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Name	Sequence (5' - 3')
AP-F	CATGCCATGACTGTGGCCCAGCCGGCCCAGKTGCAGCTCG TG GAGTCNNGGNGG
AP-R	CATGCCATGACTCGCGGCCCCCGAGGCCTCGCCTTGTGGT TTTGG TGT CTT GGG

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Table S-2. Precursor and corresponding product ions for the MRM detection

Chan Reaction	Dwell (secs)	Cone Volt.	Col. Energy
404.00 > 239.00	0.100	28.0	22.0