Supplementary Information

Nanobody-Alkaline phosphatase Fusion Protein-Based Enzyme-Linked Immunosorbent Assay for One-Step Detection of Ochratoxin A in Rice

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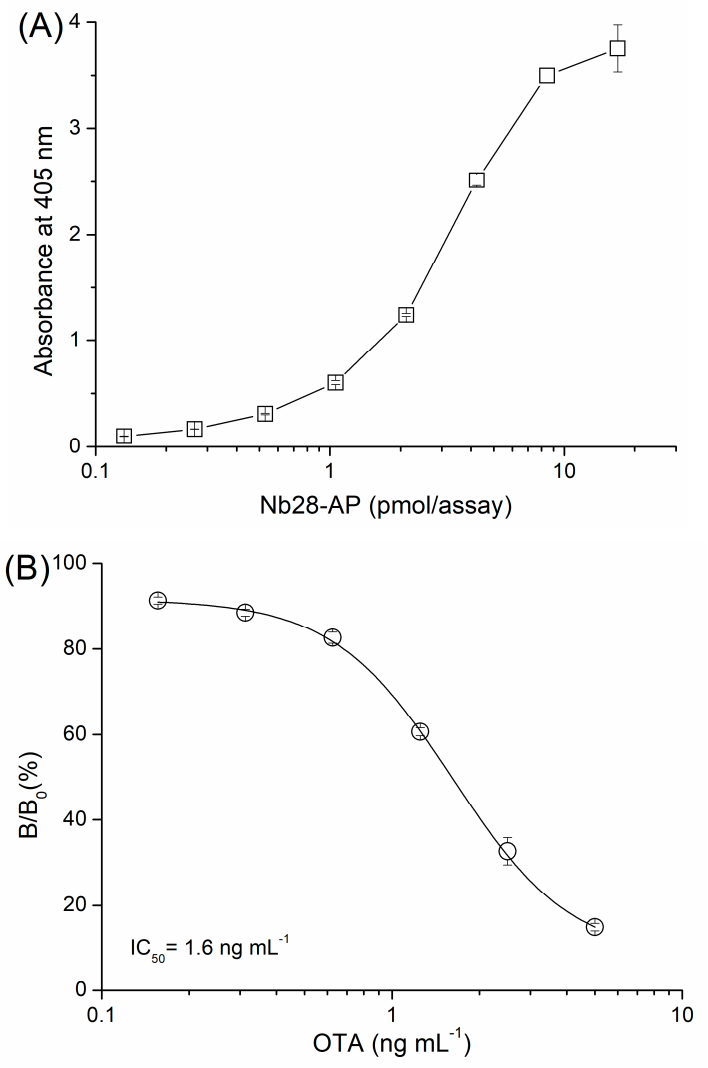


Figure S1. AP enzymatic activity and anti-OTA reactivity analysis of Nb28-AP. (**A**) Dose-response curve for AP enzymatic activity of Nb28-AP by colorimetric analysis. (**B**) Indirect competitive inhibition curve using Nb28-AP by colorimetric analysis. The error bars represent the standard deviation of three independent experiments.

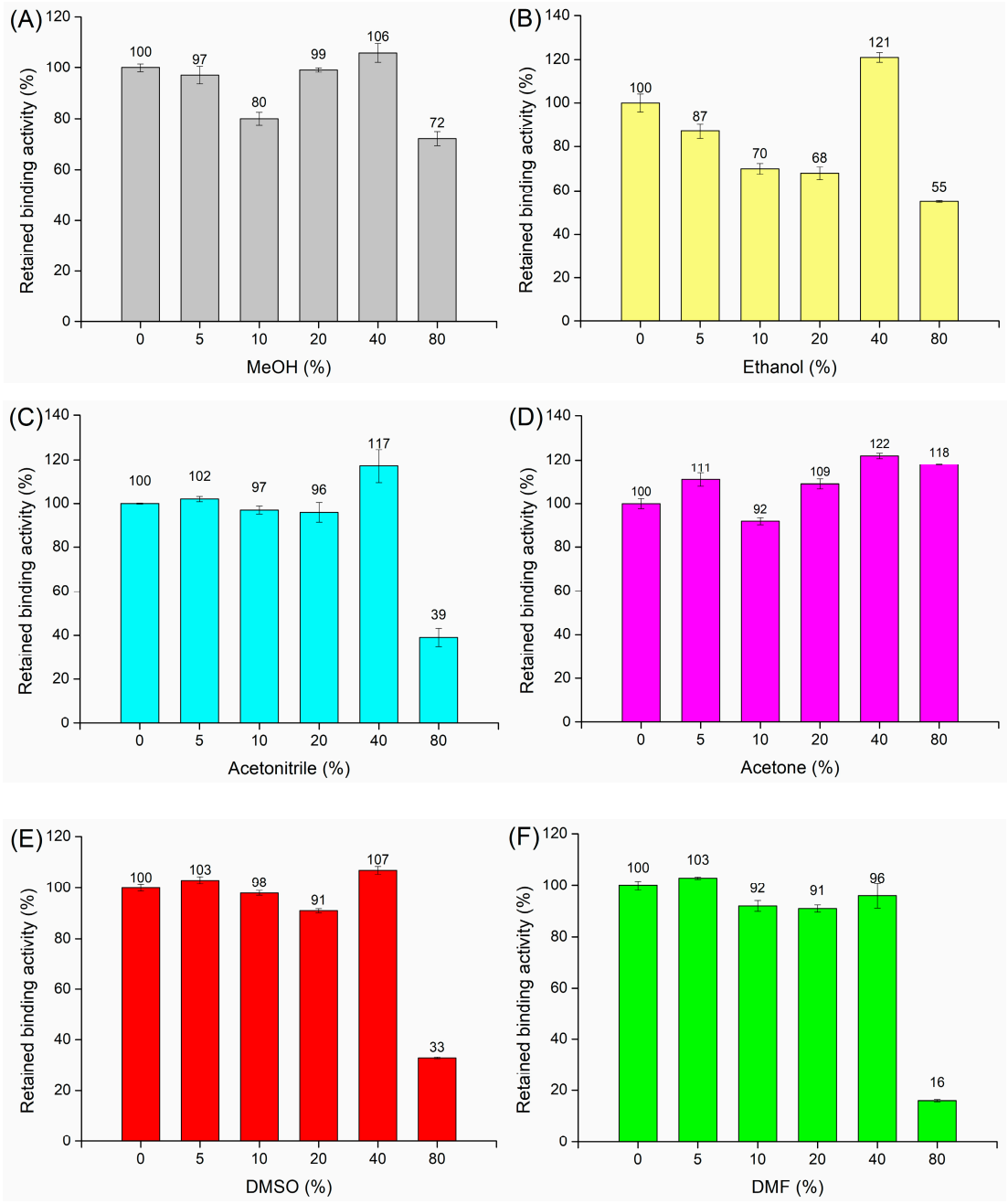
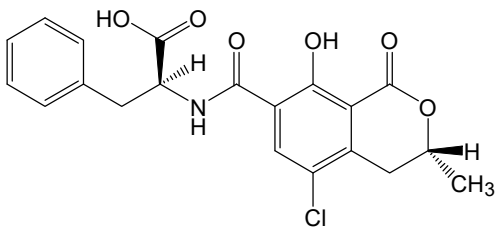
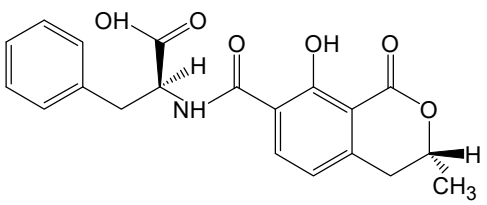


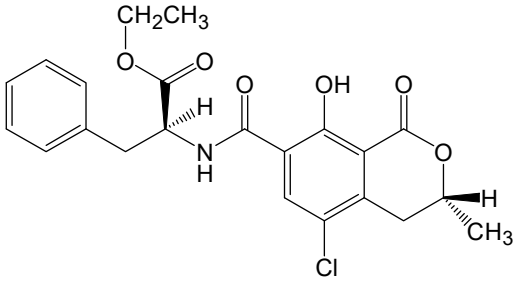
Figure S2. The solvent tolerance of Nb28-AP for methanol (**A**), ethanol (**B**), acetonitrile (**C**), acetone (**D**), DMSO (**E**), and DMF (**F**). PBS buffers containing each organic solvent at different concentrations (0%, 5%, 10%, 20%, 40%, and 80%) were used to dilute Nb28-AP, and 100 μL of the diluent was added into the wells coated with OTA-BSA. The bound Nb28-AP was detected by adding 100 μL of pNPP substrate solution. The error bars represent the standard deviation of three independent experiments.



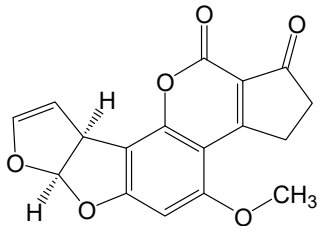
OTA



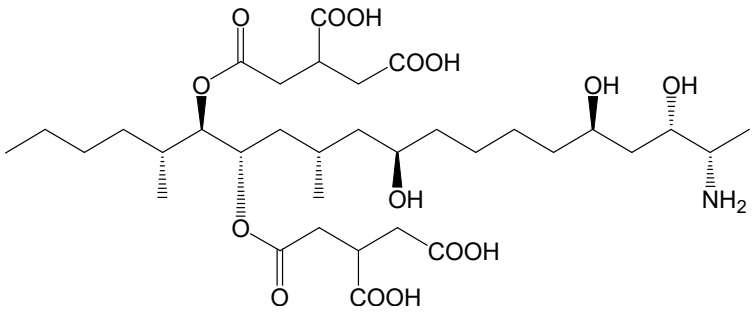
OTB



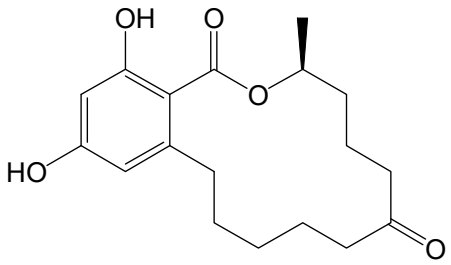
OTC



AFB1



FB1



ZEN

Figure S3. The chemical structures of OTA, OTB, OTC, AFB_1, FB_1, and ZEN.

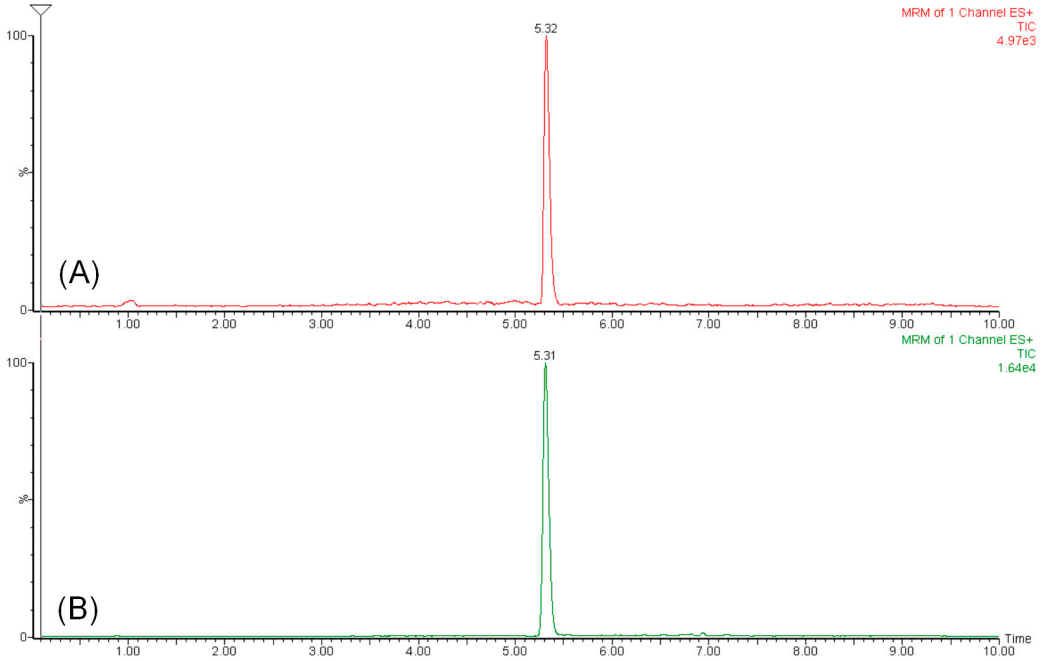


Figure S4. LC–MS/MS analysis of the OTA-contaminated rice sample (**A**) and the OTA standard (**B**).