

Supporting Information

A competitive-type pressure-dependent immunosensor for highly sensitive detection of Diacetoxyscirpenol in wheat via monoclonal antibody

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Table S1. Cross reaction of antibody 5E7 with analogues.

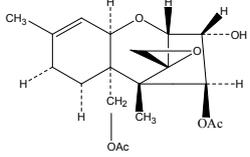
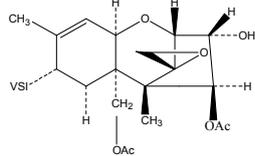
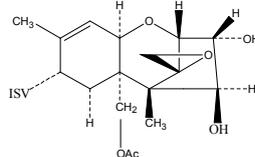
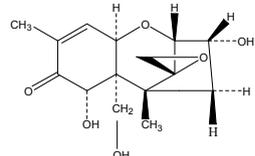
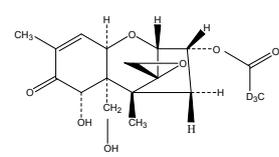
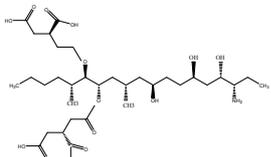
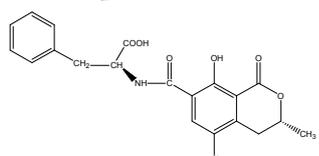
Analogues	Structures	IC ₅₀ ng/mL	Cross reactivity
Diacetoxyscirpenol		3.08	100%
T-2 toxin		>100,000	<0.01%
HT-2 toxin		>100,000	<0.01%
Deoxynivalenol		>100,000	<0.01%
3-acetyl-Deoxynivalenol		>100,000	<0.01%
Fumonisin B ₁		>100,000	<0.01%
Ochratoxin A		>100,000	<0.01%

Table S2. The detection was achieved by the LC/MS-8060 system equipped with an electrospray ionization (ESI) interface.

t_{R2}(min)	Adduct	Precursor ion(Q)^a	Production (q)^a	Q₁Pre	CE^a(V)
			307.2	-11.0	-13
2.3	NH ₄ ⁺	384.2	247.2	-14.0	-15
			229.1	-14.0	-17

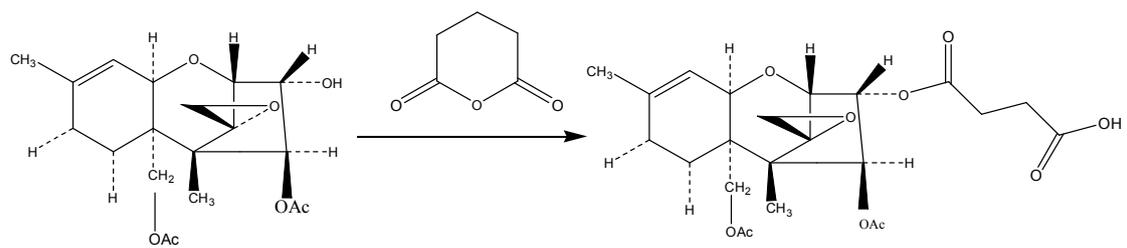


Fig. S1. Synthesis of DAS-hemiglutarate.

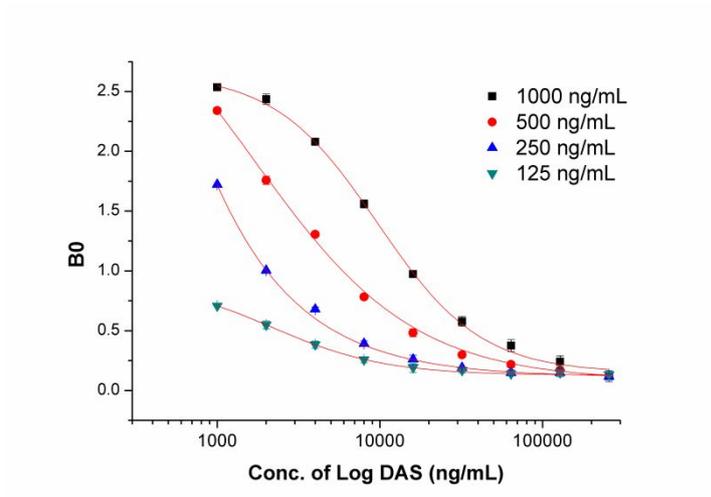


Fig. S2. The affinity constants of DAS mAbs 5E7.

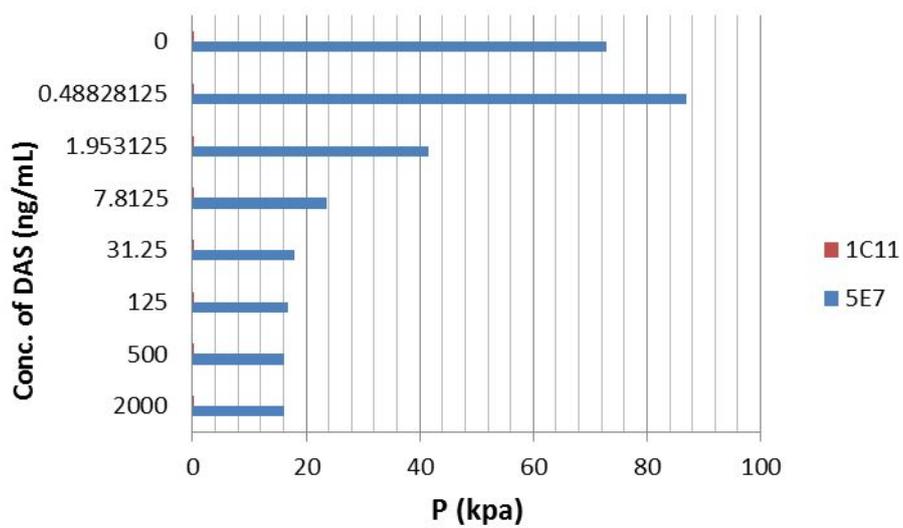


Fig. S3. Performance of CTPDI with 5E7 and 1C11