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Development of a gold-based lateral flow immunoassay for the determination of abscisic acid

(Supporting information)

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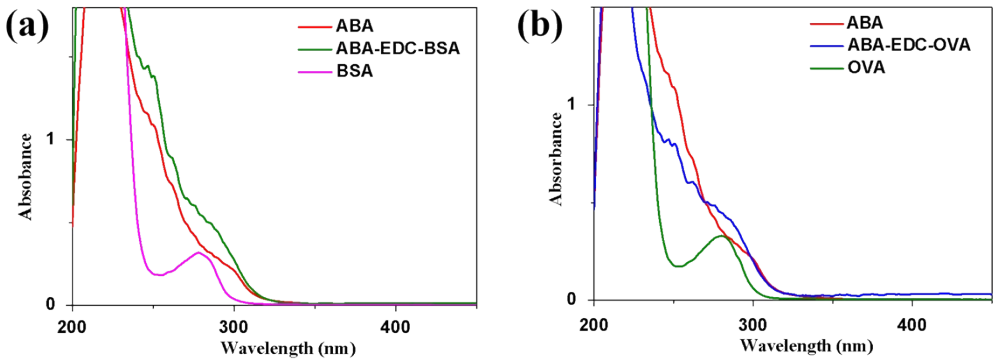

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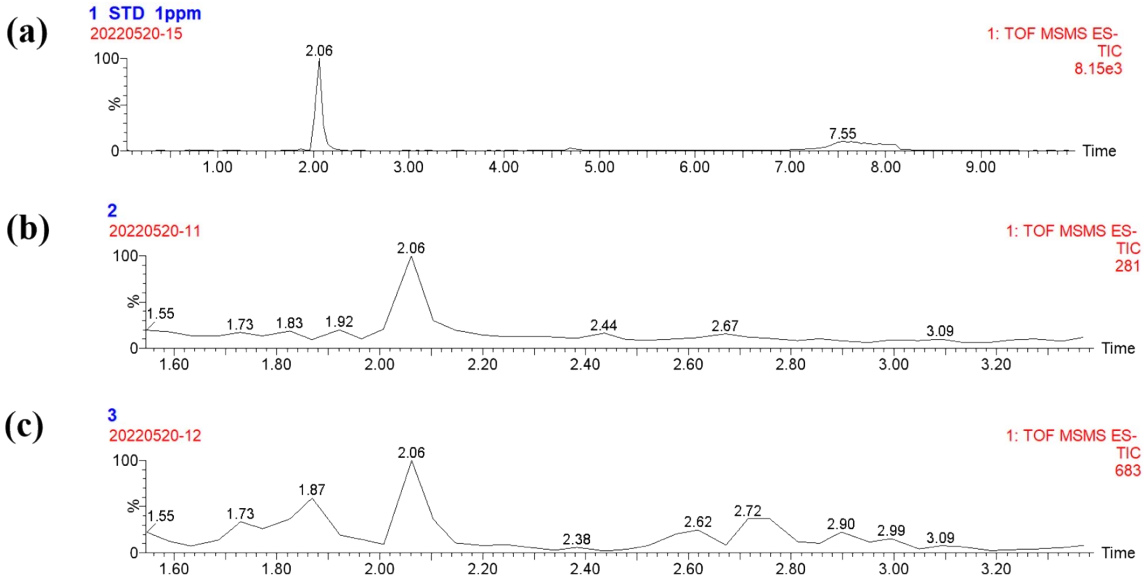

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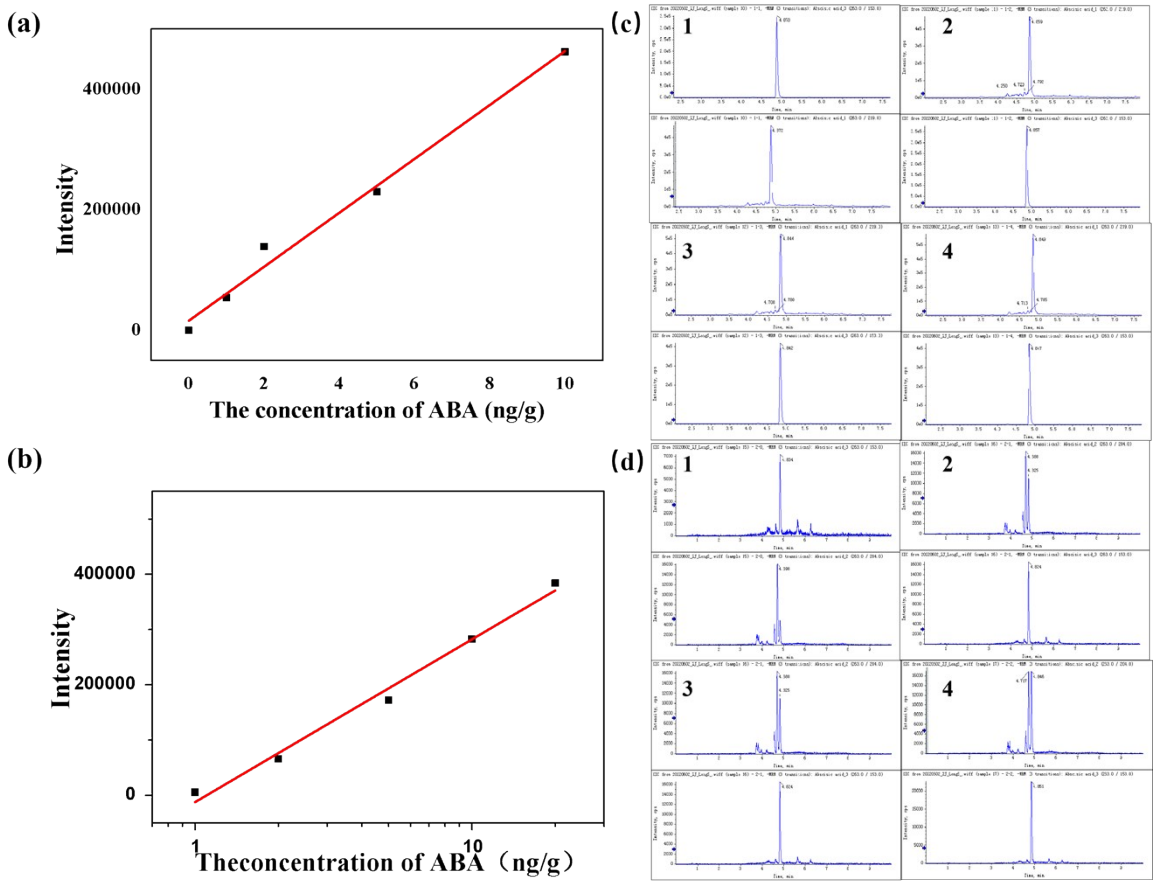

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Table S1. Cross-reactivity of mAb against abscisic acid to other plant growth regulators.

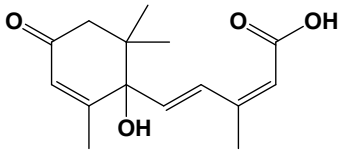
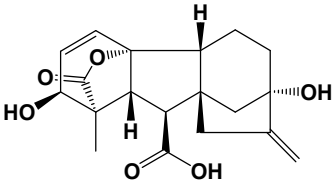
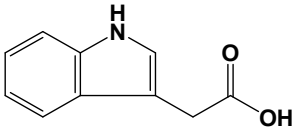
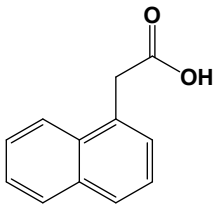
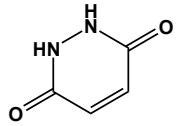
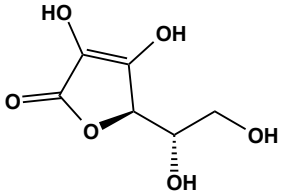
Competitor	Structure	IC_{50} (ng • mL^{-1})	CR (%)
Abscisic acid		0.66	100
Gibberellic acid		＞1000	＜0.02
Indoleacetic acid		＞1000	＜0.02
Naphthylacetic acid		＞1000	＜0.02
Maleic hydrazide		＞1000	＜0.02
L(+)-Ascorbic acid		＞1000	＜0.02

Table S2. Comparison of different methods for the detection of ABA

Method	LOD	Samples	Time (min)	Reference
HPLC-DAD	0.25 μg/mL	Honey	> 120	(Whelan et al., 2021)
3p-HF-LPME-HPLC	0.038 ng/mL	A. roxburghii	> 120	(Hong et al., 2020)
SPE–LC–MS/MS	0.84 μg/L	Seaweeds	> 120	(Yalcin et al., 2020)
HPLC-UV	1.722 μg/L	Rice	> 120	(Qi et al., 2021)
HPLC-MS/MS	0.4 μg/kg	Traditional Chinese medicines	> 120	(Luo et al., 2019)
HS-SPME-GC/MS	0.384 μg/L	Arabidopsis	> 120	(Rivers et al., 2019)
LFIA	0.14 ng/mL	Tomatoes and cowpeas	15	This study

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