

## Supplementary data and figures

**Additional methods:** Details of primers and PCR conditions.

Polymerase chain reaction (PCR)

When the PCR products were intended for cloning or sequencing, proof-reading DNA polymerase PfuUltra™ Hotstart High-Fidelity DNA Polymerase (Stratagene) or Pwo DNA polymerase (Roche) was used. For other applications, standard Taq DNA polymerase (Roche). A typical PCR reaction contained 200 μM of each dNTP, 300 nM of each primer, 1 ng template plasmid DNA, 1X PCR buffer with 2 mM MgSO<sub>4</sub>, 2.5 U of DNA polymerase and sterile double distilled water to 50 μl. The reaction mixtures were incubated for 5 min at 94°C to denature DNA and then 25 cycles of the following: 94°C for 1 min, 50-65°C for 1 min for annealing, and 72°C for 1 min for extension. Upon completion the reaction was held at 72°C for 7min. The annealing temperature depended on the melting temperatures of the primers used. PCR products were analysed by agarose gel electrophoresis.

Primer list:

Primers were designed and analysed using PrimerSelect DNASTar (DNASTar Inc, Madison, USA) or Vector NTI 9 (Invitrogen) software. Primers were obtained from MWG Biotech or Invitrogen.

Anti ABA-scFv forward	5'-TCAGAATTCCAGGTTTCAGCAGCAGTC-3'
Anti ABA-scFv reverse	5'-TGCTAAGCTTACGCCGCACGTTTCAGTT-3'
Sense aABA scFv 6His	5'-CAATAACAACAACCTCGGGATCGAG-3'
Antisense aABA scFv 6His	5'-CTAATGAAGCTTAATGATGATGATGATGAT GCGCCGCACGTTTCAGTTCCA-3'
pMal pIII sec primer	5'-CACTTCACCAACAAGGACCA-3'
Sense BAP EcoRI for pMal c2x	5'-GGAGCAGGCGAATTCGTGAGCAAG GGCGAGGAGCTGTTACCGGG-3'
Antisense BAP EcoRI for pMal c2x	5'-GGAGCTGCAAGCTTTTACTCGTGCC ACTCGATCTTCTGGGCCTCGAAGATGTCGTT CAGGCCGCCCGG-3'

PCR products were purified using QIAquick PCR purification kit (Qiagen) according to the manufacturers' instructions.