



Supplemental Figure 1. ssDNA-binding activity of *At*-OSB2.

(A) Analysis by SDS-PAGE and silver staining of the purification of *At*-OSB2 expressed in *N. benthamiana* leaves. The protein was expressed fused to a N-terminal tag composed of the FLAG and Calmodulin Binding Peptides. 1-Total soluble fraction (S20), 2-Protein eluted from Calmodulin-Sepharose, 3-Flow-through from FLAG-antibody column, 4-Washing of FLAG-antibody column, 5-Protein eluted from FLAG-antibody column.

(B) Constant quantities of *At*-OSB2 protein and probes (32 P-labeled ssDNA, dsDNA or RNA) were incubated with increasing quantities of cold ssDNA competitor and analyzed by EMSA. The nature of the probe (ssDNA, dsDNA or RNA), the presence (+) or absence (-) of *At*-OSB2 protein and the competitor to probe molar ratio (C/P) are indicated. Arrows indicate *At*-OSB2/ssDNA complexes.

(C) Scatchard blot results used to deduce the dissociation constant of *At*-OSB2 for ssDNA ((ACTG)x8 probe). The concentration of active protein used in the experiments was calculated from saturation binding curves.

(D) Affinity of *At*-OSB2 for the different homodeoxyribonucleotides used as competitors in EMSA experiments. Relative binding ratios were determined from phosphorimager quantification results.