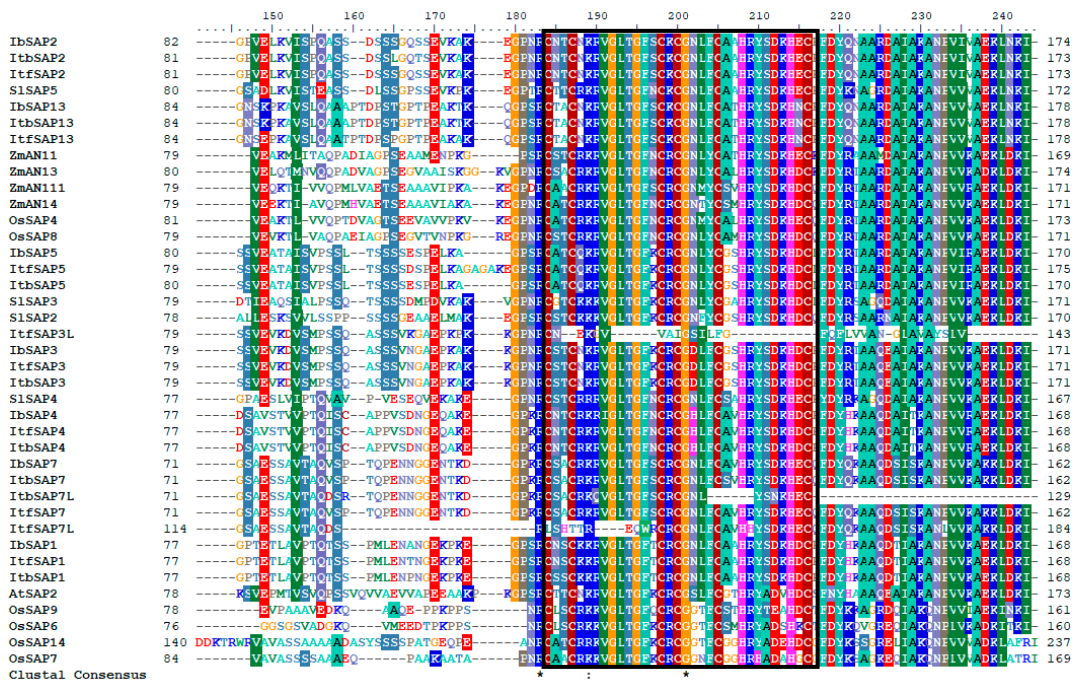
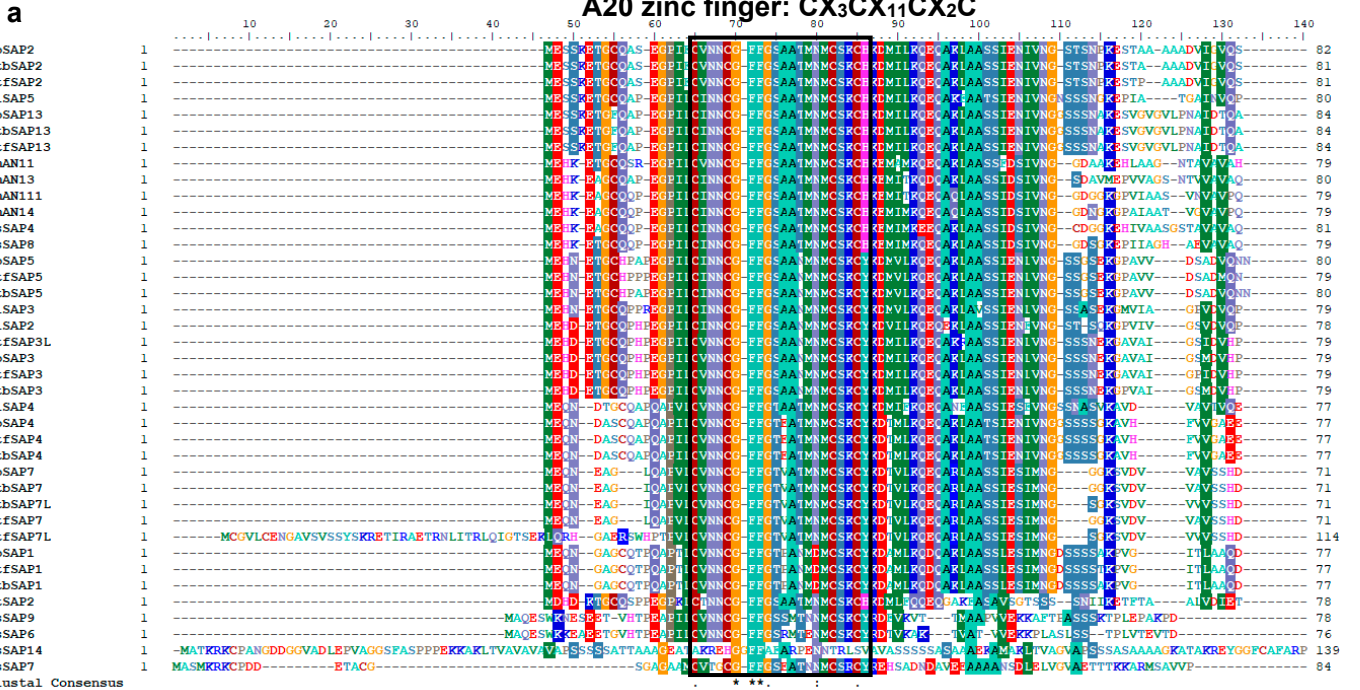
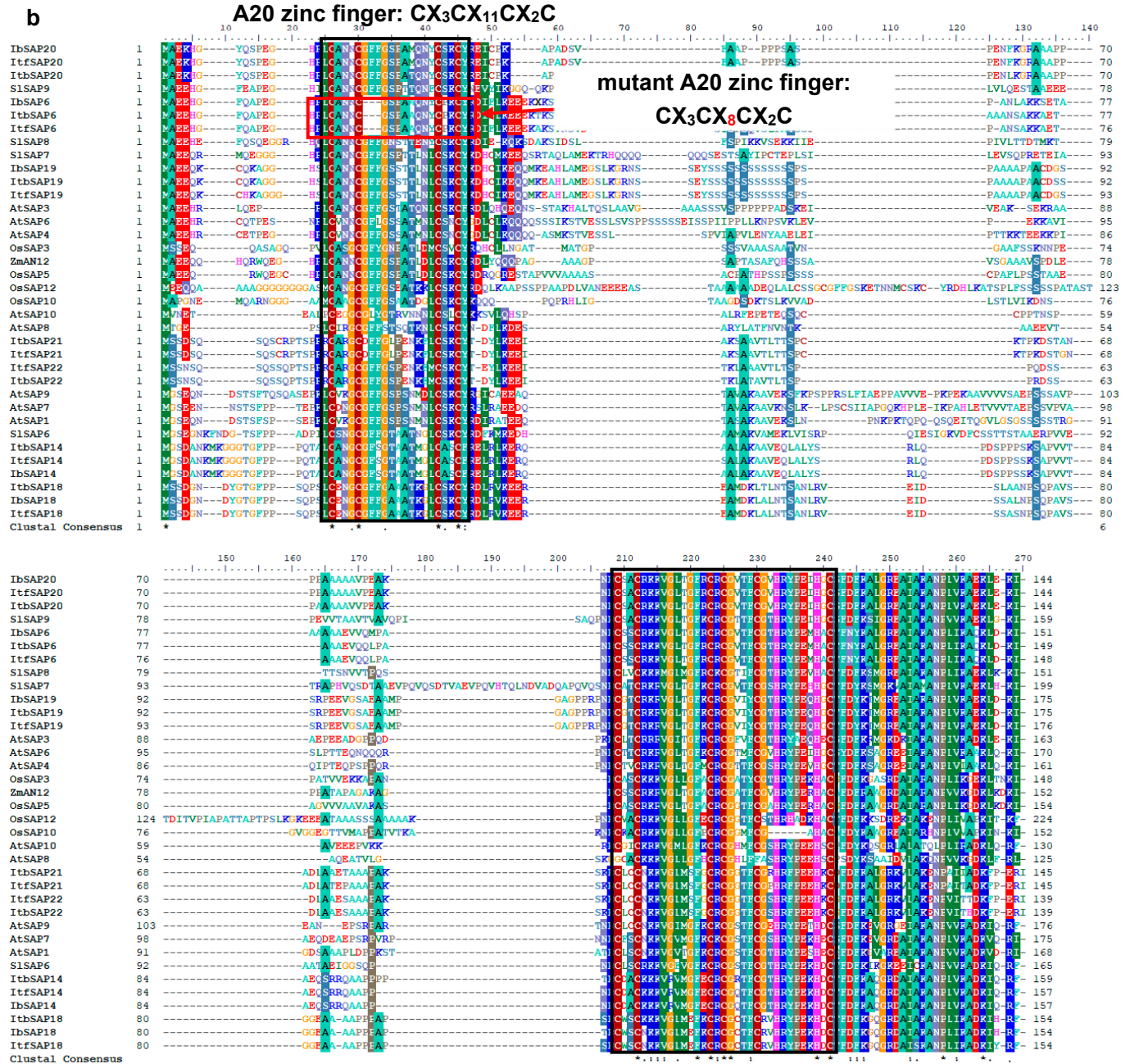


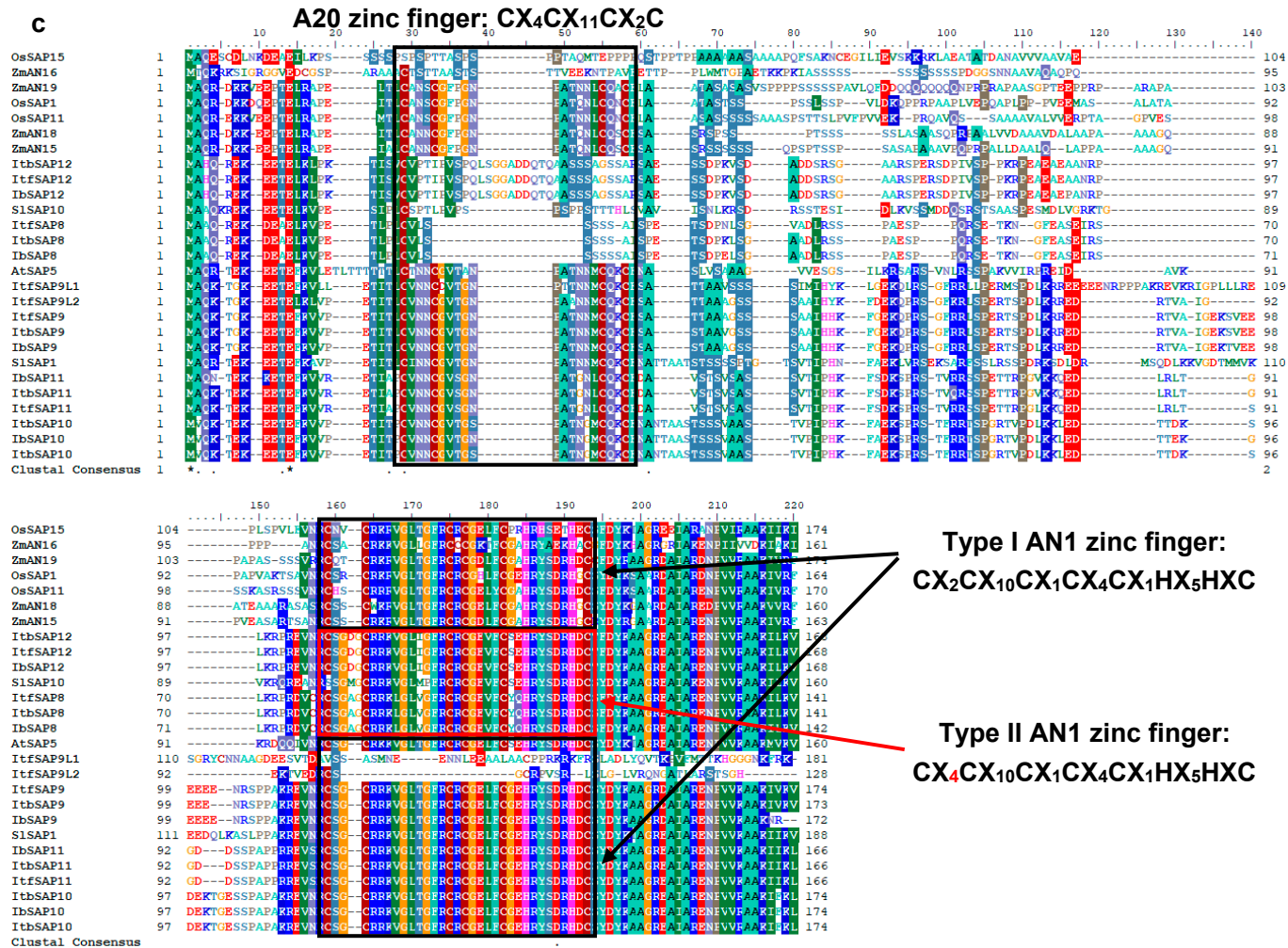
Supplementary Figures



**Type I AN1 zinc finger:
CX₂CX₉CX₁CX₄CX₂HX₅HXC**



Type I AN1 zinc finger:
CX₂CX₉CX₁CX₄CX₂HX₅HXC



d

Type II AN1 zinc finger: CX₄CX₉CX₁CX₄CX₂HX₅HXC

		10	20	30	40	50	60	70	80	90	100	
OsSAP2	1	---	---	---	---	---	---	---	---	---	---	48
OsSAP13	1	---	---	---	---	---	---	---	---	---	---	100
OsSAP18	1	---	---	---	---	---	---	---	---	---	---	95
IbSAP15	1	---	---	---	---	---	---	---	---	---	---	95
ItfSAP15	1	---	---	---	---	---	---	---	---	---	---	95
IbSAP15	1	---	---	---	---	---	---	---	---	---	---	95
SISAP11	1	---	---	---	---	---	---	---	---	---	---	94
AtSAP12	1	---	---	---	---	---	---	---	---	---	---	95
ZmAN17	1	---	---	---	---	---	---	---	---	---	---	94
OsSAP17	1	---	---	---	---	---	---	---	---	---	---	96
ZmAN110	1	---	---	---	---	---	---	---	---	---	---	89
OsSAP16	1	---	---	---	---	---	---	---	---	---	---	89
AtSAP14	1	---	---	---	---	---	---	---	---	---	---	65
AtSAP13	1	---	---	---	---	---	---	---	---	---	---	89
AtSAP11	1	---	---	---	---	---	---	---	---	---	---	89
SISAP13	1	---	---	---	---	---	---	---	---	---	---	89
IbSAP16	1	---	---	---	---	---	---	---	---	---	---	89
IbSAP16	1	---	---	---	---	---	---	---	---	---	---	89
ItfSAP16	1	---	---	---	---	---	---	---	---	---	---	89
SISAP12	1	---	---	---	---	---	---	---	---	---	---	89
ItfSAP17	1	---	---	---	---	---	---	---	---	---	---	89
IbSAP17	1	---	---	---	---	---	---	---	---	---	---	89
IbSAP17	1	---	---	---	---	---	---	---	---	---	---	89
Clustal Consensus												

		110	120	130	140	150	160	170	180	190	200	
OsSAP2	49	---	---	---	---	---	---	---	---	---	---	104
OsSAP13	101	---	---	---	---	---	---	---	---	---	---	191
OsSAP18	96	---	---	---	---	---	---	---	---	---	---	163
IbSAP15	96	---	---	---	---	---	---	---	---	---	---	168
ItfSAP15	96	---	---	---	---	---	---	---	---	---	---	168
IbSAP15	96	---	---	---	---	---	---	---	---	---	---	168
SISAP11	96	---	---	---	---	---	---	---	---	---	---	165
AtSAP12	96	---	---	---	---	---	---	---	---	---	---	165
ZmAN17	96	---	---	---	---	---	---	---	---	---	---	156
OsSAP17	97	---	---	---	---	---	---	---	---	---	---	164
ZmAN110	90	---	---	---	---	---	---	---	---	---	---	167
OsSAP16	90	---	---	---	---	---	---	---	---	---	---	168
AtSAP14	66	---	---	---	---	---	---	---	---	---	---	109
AtSAP13	90	---	---	---	---	---	---	---	---	---	---	163
AtSAP11	90	---	---	---	---	---	---	---	---	---	---	172
SISAP13	90	---	---	---	---	---	---	---	---	---	---	164
IbSAP16	90	---	---	---	---	---	---	---	---	---	---	164
IbSAP16	90	---	---	---	---	---	---	---	---	---	---	164
ItfSAP16	90	---	---	---	---	---	---	---	---	---	---	164
SISAP12	90	---	---	---	---	---	---	---	---	---	---	165
ItfSAP17	90	---	---	---	---	---	---	---	---	---	---	165
IbSAP17	90	---	---	---	---	---	---	---	---	---	---	165
IbSAP17	90	---	---	---	---	---	---	---	---	---	---	165
Clustal Consensus												

Type II AN1 zinc finger: CX₄CX₁₁CX₁CX₄CX₂HX₅HXC

		210	220	230	240	250	260	270	280	290	300	
OsSAP2	104	---	---	---	---	---	---	---	---	---	---	124
OsSAP13	191	---	---	---	---	---	---	---	---	---	---	211
OsSAP18	163	---	---	---	---	---	---	---	---	---	---	183
IbSAP15	168	---	---	---	---	---	---	---	---	---	---	182
ItfSAP15	168	---	---	---	---	---	---	---	---	---	---	182
IbSAP15	168	---	---	---	---	---	---	---	---	---	---	182
SISAP11	165	---	---	---	---	---	---	---	---	---	---	179
AtSAP12	165	---	---	---	---	---	---	---	---	---	---	176
ZmAN17	156	---	---	---	---	---	---	---	---	---	---	170
OsSAP17	164	---	---	---	---	---	---	---	---	---	---	178
ZmAN110	168	---	---	---	---	---	---	---	---	---	---	258
OsSAP16	169	---	---	---	---	---	---	---	---	---	---	258
AtSAP14	110	---	---	---	---	---	---	---	---	---	---	169
AtSAP13	164	---	---	---	---	---	---	---	---	---	---	217
AtSAP11	173	---	---	---	---	---	---	---	---	---	---	247
SISAP13	165	---	---	---	---	---	---	---	---	---	---	246
IbSAP16	165	---	---	---	---	---	---	---	---	---	---	245
IbSAP16	165	---	---	---	---	---	---	---	---	---	---	245
ItfSAP16	165	---	---	---	---	---	---	---	---	---	---	245
SISAP12	166	---	---	---	---	---	---	---	---	---	---	245
ItfSAP17	166	---	---	---	---	---	---	---	---	---	---	262
IbSAP17	166	---	---	---	---	---	---	---	---	---	---	262
IbSAP17	166	---	---	---	---	---	---	---	---	---	---	262
Clustal Consensus												

C₂H₂ zinc finger

		310	320	330	
OsSAP2	125	---	---	---	148
OsSAP13	212	---	---	---	236
OsSAP18	184	---	---	---	201
IbSAP15	182	---	---	---	192
ItfSAP15	182	---	---	---	192
IbSAP15	182	---	---	---	192
SISAP11	179	---	---	---	188
AtSAP12	176	---	---	---	186
ZmAN17	170	---	---	---	180
OsSAP17	178	---	---	---	188
ZmAN110	259	---	---	---	290
OsSAP16	259	---	---	---	290
AtSAP14	170	---	---	---	191
AtSAP13	218	---	---	---	249
AtSAP11	248	---	---	---	279
SISAP13	247	---	---	---	277
IbSAP16	246	---	---	---	277
IbSAP16	246	---	---	---	277
ItfSAP16	246	---	---	---	277
SISAP12	241	---	---	---	272
ItfSAP17	263	---	---	---	294
IbSAP17	263	---	---	---	294
IbSAP17	263	---	---	---	294
Clustal Consensus					

C₂H₂ zinc finger

Figure S1. Alignment of amino acid sequences of clade I **(a)**, II **(b)**, III **(c)**, and IV **(d)** SAPs mentioned in this study. Amino acid sequences of SAPs were aligned and shown with ClustalW method in BioEdit program. A20 zinc fingers, type I AN1 zinc fingers, type II AN1 zinc fingers, and C₂H₂ zinc fingers were indicated with frames, respectively. “*” indicates positions which have a single, fully conserved residue. “:” indicates that one of the following ‘strong’ groups is fully conserved. “.” indicates that one of the following ‘weaker’ groups is fully conserved.

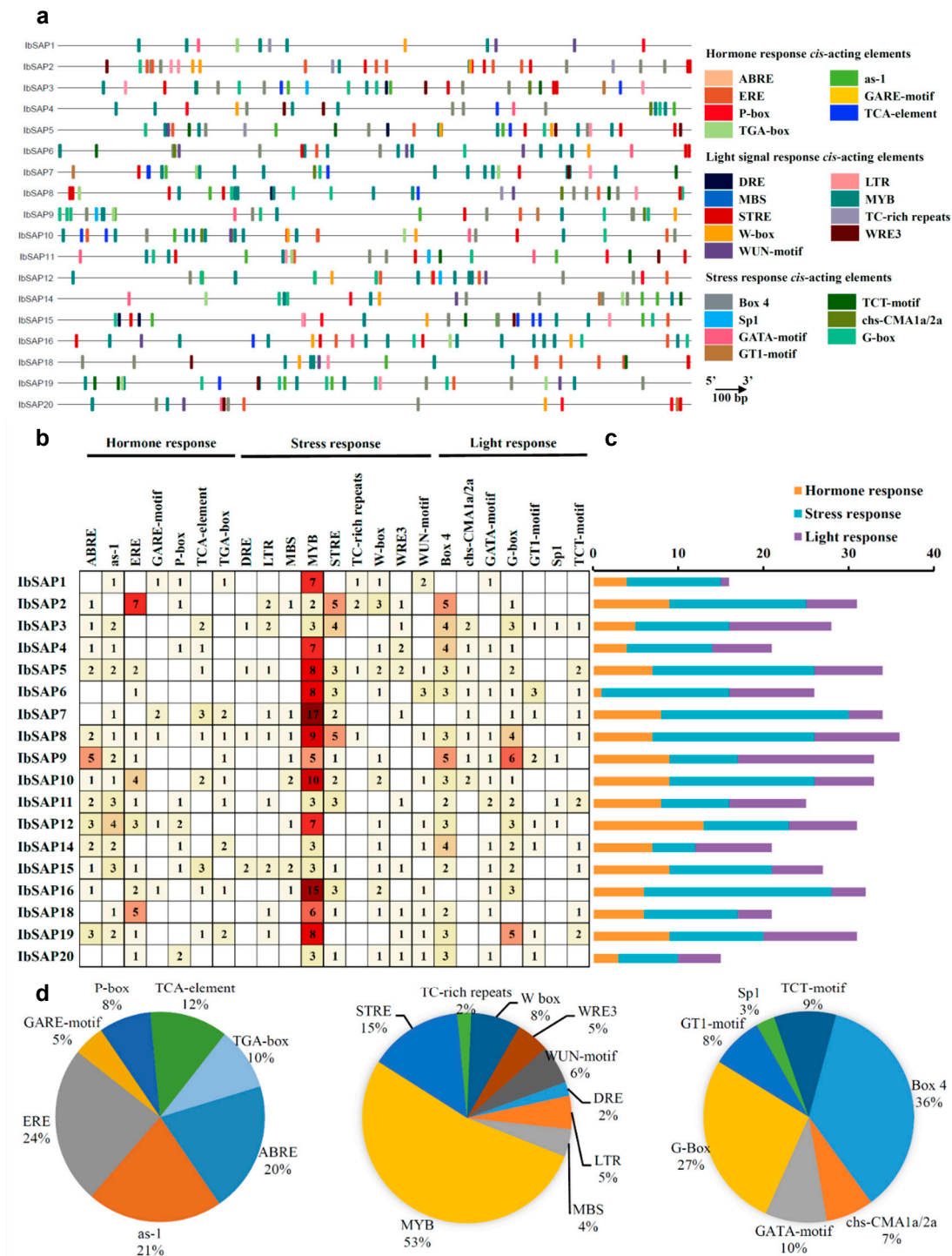


Figure S2. *Cis*-acting elements prediction in *IbSAP* promoters. 2,000 bp upstream sequences of *IbSAPs* were sent to PlantCARE for *cis*-acting element analysis. **a**, distribution of *cis*-element in *IbSAP* promoters. **b**, numbers indicate the number of each *cis*-acting element in the promoter of each *IbSAP* gene. **c**, numbers of hormone, light, and stress response *cis*-acting elements in the promoter of each *IbSAP* gene are shown. **d**, the percentage of different *cis*-acting elements in each element class.

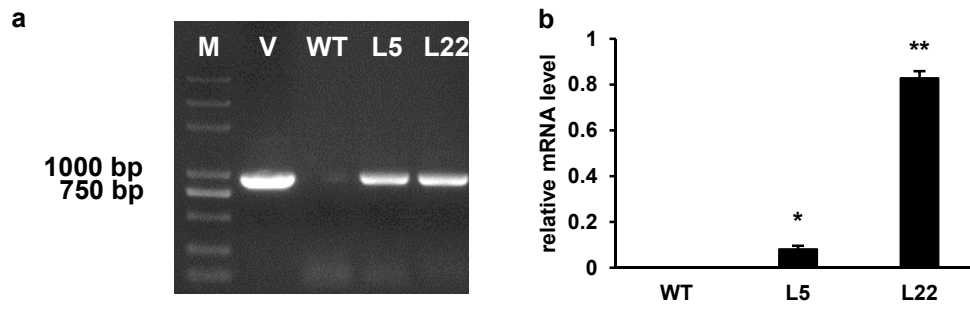


Figure S3. Identification of *IbSAP16*-transgenic *Arabidopsis*. **a**, genome PCR identification of *IbSAP16*-transgenic *Arabidopsis* lines. M, marker; V, pGWB12-*IbSAP16* vector control; WT, wild type *Arabidopsis*; L5 and L22, *IbSAP16*-transgenic *Arabidopsis* line 5 and 22. **b**, relative expression level of *IbSAP16* in WT and transgenic lines by RT-qPCR. The *Arabidopsis Actin2* gene was used as an internal reference. Data are presented as means \pm standard error (n = 3). "*" or "**" indicate a significant difference from that of WT at $p < 0.05$ or 0.01, by Student's *t*-test.