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Appendix Table S1: DNA sequence of ABA-responsive reporter construct

The ABA-responsive reporter construct used in yeast experiments consists of four ABRE *cis*-elements (bold) positioned upstream of a 35S-minimal promotor (underlined), which is followed by the luciferase gene (red) and the NOS-terminator (blue). The restriction sites NotI and Sall (italic) were used for cloning the fragment into the yeast *LYS2* disintegration vector pIS385 (Sadowski et al, 2007).

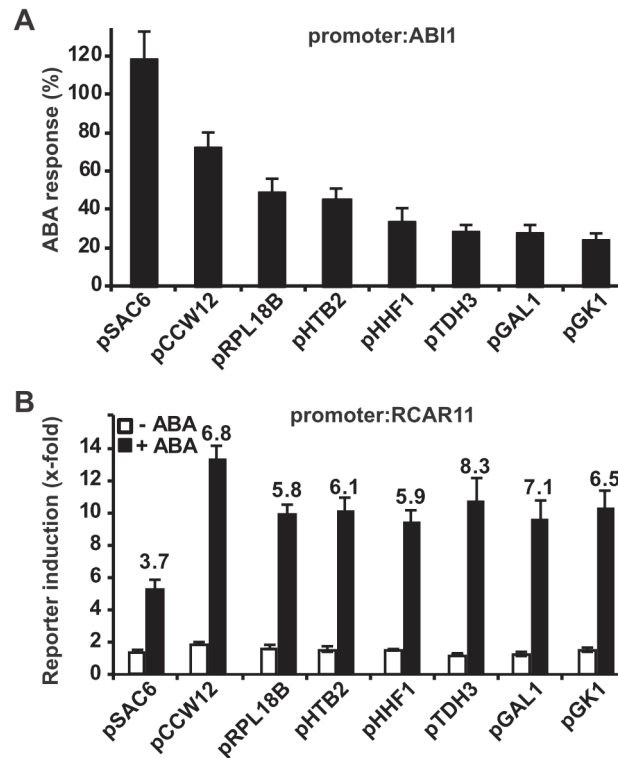
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Appendix Table S2: Significance of ABA-independent and ABA-dependent RCAR effects.

Statistical analysis to Fig. 2A.

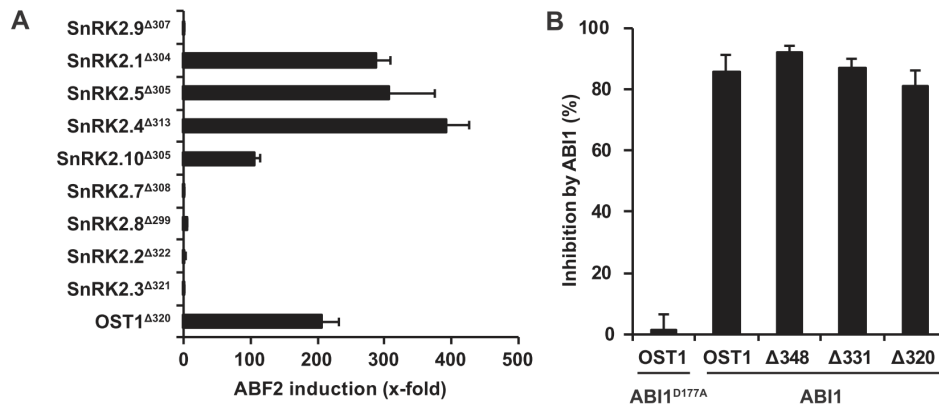
ABA-independent RCAR induction Welch-corrected one sided t-test; $\alpha=0.05$		ABA-dependent RCAR induction Welch-corrected one sided t-test; $\alpha=0.05$	
control/no-ABA to RCAR/no-ABA	p-value	RCAR/no ABA to RCAR/ 0.1 μM ABA	p-value
RCAR1	4.43E-05	RCAR1	2.58E-11
RCAR2	9.99E-01	RCAR2	2.58E-11
RCAR3	1.05E-08	RCAR3	1.47E-06
RCAR4	1.37E-08	RCAR4	7.51E-01
RCAR5	9.80E-01	RCAR5	3.23E-13
RCAR6	3.31E-01	RCAR6	4.34E-07
RCAR7	9.63E-01	RCAR7	3.81E-01
RCAR8	1.00E+00	RCAR8	1.63E-08
RCAR9	7.32E-01	RCAR9	1.41E-08
RCAR10	1.00E+00	RCAR10	1.62E-08
RCAR11	1.00E+00	RCAR11	1.43E-08
RCAR12	1.00E+00	RCAR12	4.46E-08
RCAR13	7.12E-01	RCAR13	7.79E-11
RCAR14	1.00E+00	RCAR14	1.34E-09



Appendix Fig. S1: Effect of different promoters driving expression of ABI1 and RCAR11 on reporter regulation.

- A) The inhibition of ABF2- and OST1^{Δ320}-mediated luciferase reporter activity was assayed by expression of ABI1 under the control of different yeast promoters as indicated.
- B) Regulation of the ABF2-OST1^{Δ320}-ABI1 pathway by expression of RCAR11 in the absence or presence of 0.1 mM ABA. ABI1 was expressed under the control of the constitutive active GK1-promoter and a variety of promoters were used as indicated for RCAR11 expression. The numbers on top of the columns indicate the fold induction by ABA. Based on these results, the GK1- and TDH3-promotor were used in subsequent analyses for expression of PP2Cs and RCARs, respectively.

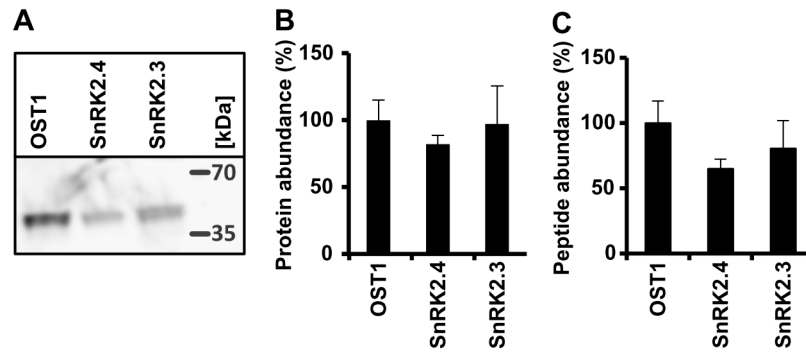
Data information: The data represent the mean \pm s.d; n = 6 biological replicates derived from three independent yeast transformants. In (A) yeast cells expressing no ABI1 served as 100 % control while in (B) the activity of samples without RCAR 11 was set to 1 for both treatments.



Appendix Fig. S2: Transactivation by SnRK2 members with deleted ABA-box and inhibition of OST1 variants by ABI1.

- A) The ABA-box of SnRK2s was removed and the truncated protein kinases examined for transactivation of ABF2 in yeast.
- B) Efficiency of ABI1 to inhibit the transactivation of OST1 and versions with partial (Δ 348, Δ 331) or complete (Δ 320) deletion of the ABA-box. Samples without ABI1 expression were set to 100% activity and the catalytically inactive ABI1^{D177A} served as additional control.

Data information: The data represent the mean \pm s.d; n = 6 biological replicates derived from three independent yeast transformants.



Appendix Fig. S4: Comparable protein expression levels of OST1 and SnRK2.4 in yeast.

- A) OST1, SnRK2.2, and SnRK2.3 were immuno-detected by Western blotting of 10 μ g yeast extracts by FLAG-specific antibodies.
- B) Quantitative dot-blot analysis of 100 ng yeast extracts with the FLAG immuno-signal for OST1 set to 100%.
- C). Relative peptide intensity of the SnRK2-peptides identified by mass spectrometric analysis normalized to the overall peptide intensity. Signal for OST1 is set to 100%.

Data Information: The data in (B) and (C) represent the mean \pm s.d. of four biological replicates.