

Key to photo panel

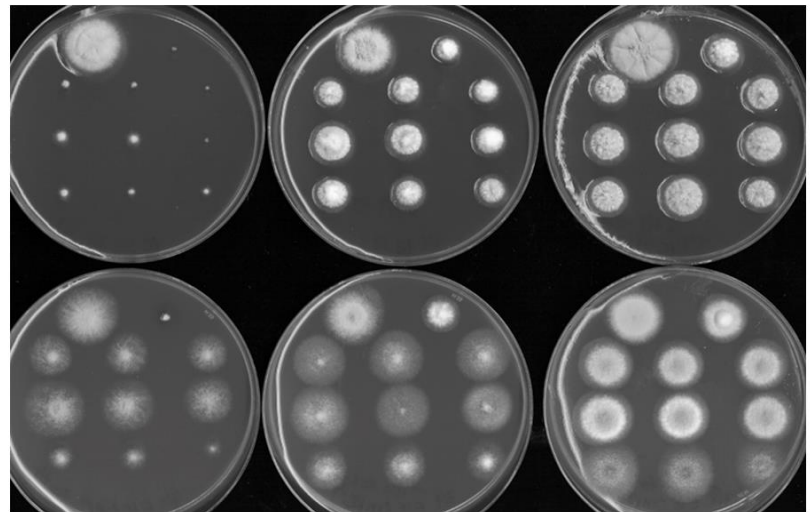
	Wild-type PCS 439	<i>snxA1</i> SWJ 2862
<i>alca::snxA</i> transformants:		
9-exon genomic DNA →	4096 (<i>argB</i>)	4097 (<i>argB</i>)
9-exon cDNA →	5154 (<i>argB</i>)	5153 (<i>snxA</i>)
11-exon cDNA →	5291 long (<i>argB</i>)	5297 sh-1 (<i>argB</i>)
		5129 sh-2 (<i>snxA</i>)

Top row: Repressing medium, 2% glucose

20°

29°

37°



Bottom row: Inducing medium, 200 mM ethanol + 0.04% fructose

DNA sequences of 5' UTR leaders in *alca::snxA* cDNA fusions in pSDW 194:

9-exon genomic DNA (4095/4096/4097) -

(*KpnI-SmaI/SpeI*) M P Y G D

palca - GGTACCC/AGT GTC TTA ATG CCT TAC GGC GAC

9-exon cDNA (5153/5154) -

(*KpnI*) M P Y G D

palca - GGTA CCT GAC CTT TAT TGT TTC GCC GTC TTA ATG CCT TAC GGC GAC

11-exon cDNA, short-1 UTR, *snxA* integration (5129) -

(*KpnI*) M A D V Y

palca - GGTACC TCT GTT TGG ACA CCT CCG ACC GCG TCT TCA AC ATG GCC GAC GTC TAT

11-exon cDNA, short-2 UTR, *argB* integration (5297) -

(*KpnI*) M A D

palca - GGTAC CAG CCT CTC TGT TTG GAC ACC TCC GAC CGC GTC TTC AAC ATG GCC GAC

11-exon cDNA, long UTR, *argB* integration (5291) -

(*KpnI*) M A D

palca - GGTAC CTT TGT TGT GAG TTG CGG GAG GAT / 129 nt / GTC TTC AAC ATG GCC GAC

KEY: 5' UTR sequences underlined; START codon in bold; single-letter amino acid sequence shown above DNA sequence

Figure S9 *snxA* cDNA overexpression complements *snxA1* cold-sensitivity. Growth phenotypes of transformants of SWJ 3676 (*riboA1*; *snxA1*; *argB2*; *pyroA4*; *chaA1*) carrying a single copy of an *alca::snxA* genomic or cDNA clone integrated at either the *argB* or the *snxA* locus. Integration at *argB* or *snxA* is indicated in parentheses under the strain number. Shown for the 11-exon cDNA are representative strains containing varying lengths of 5'UTR sequence between the *alca* promoter and the cDNA start codon: long, 162 nt; sh-1 (short-1), 32 nt; sh-2, 39 nt (cf. Table S1). For *argB* integrants of the 9-exon gDNA and 11-exon cDNA, two representative transformants are shown. Strains were point-inoculated using conidia from fresh streaks. Plates were incubated for the following times in repressing medium (2% glucose): 20° - 7 days; 29° and 37° - 48 hours. Inducing medium (200 mM ethanol + 0.04% fructose): 20° - 8 days; 29° and 37° - 60 hours.