

Figure S1 Independent deletion of *sad-3*⁺ results in strains (P16-27 and P16-28) that produce a low number of ascospores and occasional four-spored asci in heterozygous crosses. Strains used in the above crosses include F2-23, P8-42, and P16-27.

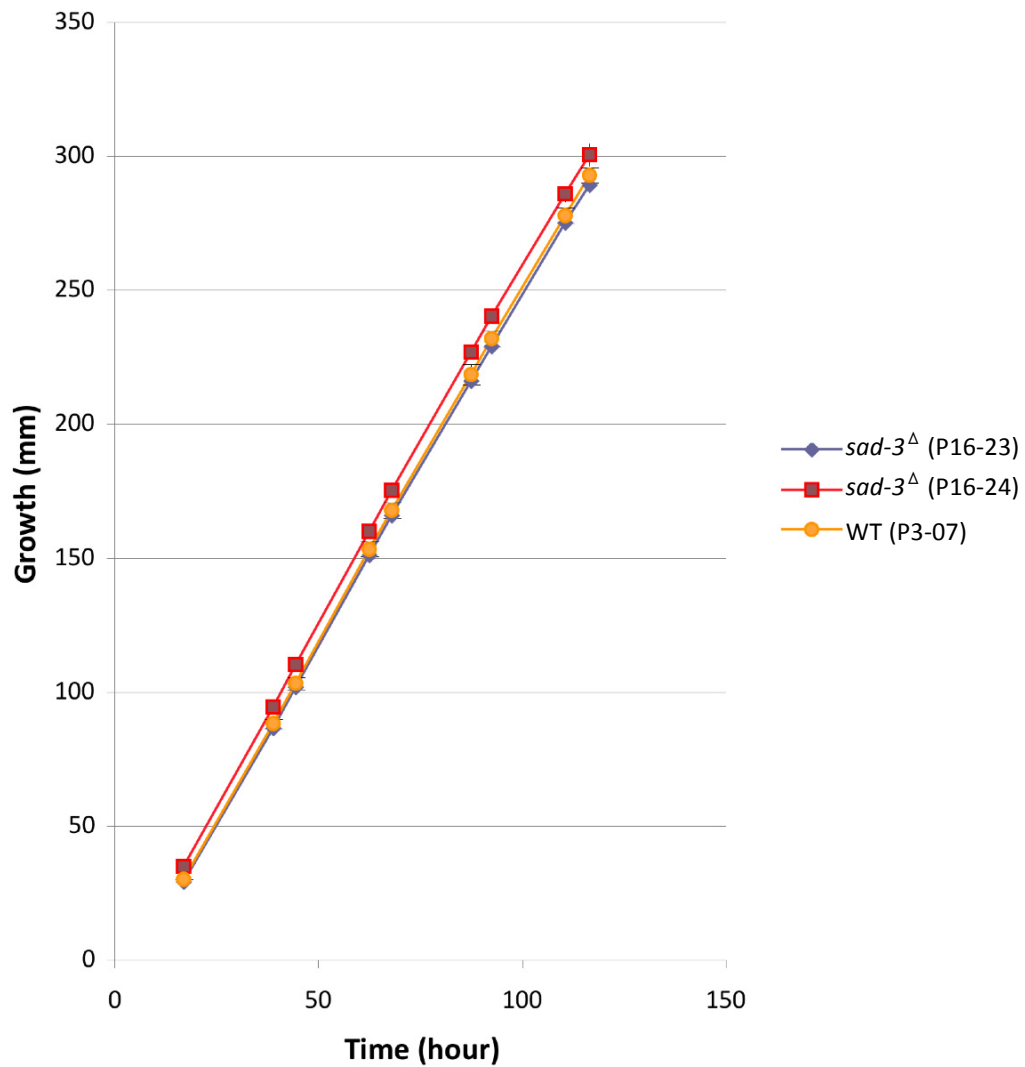


Figure S2 Linear growth of *sad-3*^Δ is normal. Race tube assays were performed on two *sad-3*^Δ strains and a wild-type (WT) control, essentially according to the method described by D. D. Perkins (<http://www.fgsc.net/neurosporaprotocols/How%20to%20measure%20and%20monitor%20line%20final.pdf>). Three race tubes were used per strain, with the position of leading hyphae marked twice daily starting at 17 hours post-inoculation.

Table S1 Primers designed for this study

Primer	Sequence (5' to 3')	Amplification of
NCU09211-101191R	CTCAGCTCAAACATTGGTGATTC	KO (knockout) vector
NCU09211-A	CGCTCGGCAAGGGTTCTACATA	C-terminal GFP tag (left flank)
NCU09211-GFP1	CAGCGCCTGCACCAGCTCCTGCCCTTCGGGTTCCCAAAGTCAATCAAC	C-terminal GFP tag (left flank)
NCU09211-GFP2	CTCCTTCAATATCAGTTAACAAAGGGCTGGACATTAGAGGCGGCAAAG	C-terminal GFP tag (right flank)
NCU09211-B	TGTGGCGATGCTAACGGACTACTG	C-terminal GFP tag (right flank), KO vector
NCU09211-C	GGTCAACCGAGAACTTGGGCTTC	C-terminal GFP tag (nested primer)
NCU09211-D	GGAATGGAAGGTGGCCGAGAA	C-terminal GFP tag (nested primer)
NCU09211-E	ATACTTGAGGGTCGGCTCGGATG	N-terminal GFP and YFPN tags (left flank)
NCU09211-NGFP1	GCAGCCTGAATGGCGAATGGACGCGCCGCTGAGAGGATGAGGAAATGGA	N-terminal GFP and YFPN tags (left flank)
NCU09211-NGFP2	CAGGAGCGGGTGCGGGTGTGGAGCGATGGCCAACCGCAGAGTGGATTC	N-terminal GFP and YFPN tags (right flank)
NCU09211-F	CGGTCATCCTCCAGTTCCTGA	N-terminal GFP and YFPN tags (right flank)
NCU09211-G	CCCGTCCAAACTCAGCTCAAAC	N-terminal GFP and YFPN tags (nested primer)
NCU09211-H	CACATTGAACTCGCGCAGGGATT	N-terminal GFP and YFPN tags (nested primer)