

Supplemental Figure Legends

Supplemental Figure 1. Alpha factor release assay showed slower bud growth in *swf1Δ* cells (KKY1146; grey line, diamonds) relative to a congenic wild-type strain (KKY1147; black line, squares), in rich medium at 25°C. 100 cells were counted at each time point. In this experiment, at time 0, 93% and 99% of the *swf1Δ* and *SWF1* cultures, respectively, were unbudded. This experiment is representative of two independent assays.

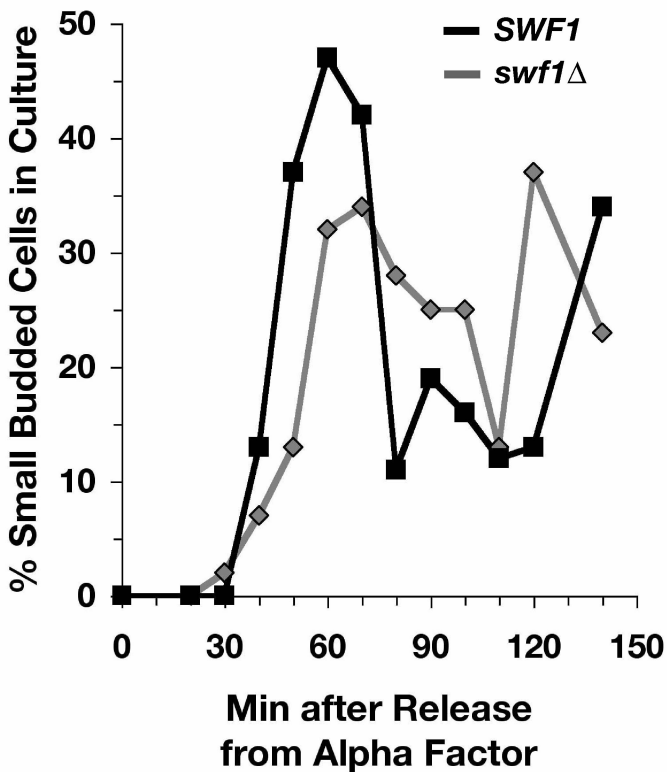
Supplemental Figure 2. Immunoblot of 1 ng of recombinant GST and GST-Swf1-Cp probed with purified rabbit polyclonal antibody raised against GST-Swf1-Cp.

Supplemental Figure 3. GST-Swf1-Cp did not bind F- or G-actin. A) A supernatant depletion assay showed that a C-terminal fragment of Swf1p (amino acids 235-336) fused to GST (GST-Swf1-Cp) did not co-sediment with F-actin in a concentration dependent manner. The amount of F-actin added to each reaction was varied, while the concentration of GST-Swf1-Cp was held constant. Shown are the final actin and GST-Swf1-Cp concentrations in each reaction. After ultracentrifugation, equivalent volumes were analyzed on 13% SDS-PAGE gel stained with Coomassie Blue. B) A pyrene-actin assembly assay showed that a C-terminal fragment of Swf1p (GST-Swf1-Cp) did not bind G-actin at 25°C. The black curve represents the assembly of F-actin from 4 μM G-actin. The grey curve represents the assembly of F-actin from 4 μM G-actin in the presence of 7.4 μM GST-Swf1-Cp.

Supplemental Table 1. Bud morphology index of strains lacking *SWF1*

Genotype	% Unbudded	% Small- Budded	% Medium- Budded	% Large- Budded	% Multiple Buds	Strain
<i>SWF1</i>	43	34	10	13	0	KKY 1064
<i>swf1Δ</i>	30	44	9	16	1	KKY 1063
<i>SWF1/SWF1</i>	39	34	9	19	0	DDY 1102
<i>swf1Δ/swf1Δ</i>	35	43	11	12	0	KKY 1060

500 cells of each strain, grown in rich medium in log-phase at 25°C, were scored by phase-contrast microscopy. A cell was scored as unbudded if no bud was observed, small-budded if the bud volume appeared <30% the volume of the mother cell, medium-budded if the bud volume appeared 30-50% the volume of the mother cell, and large-budded if bud volume appeared >50% the volume of the mother cell. Before scoring, cells were fixed with 3.4% formaldehyde and sonicated briefly. Other *swf1Δ* strains (not shown) gave a similar budding index.



Supplemental Figure 1

GST

GST-Swift-C

45 kD

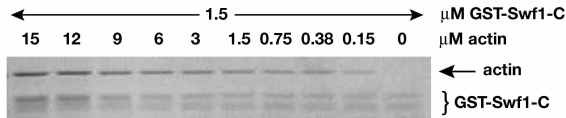
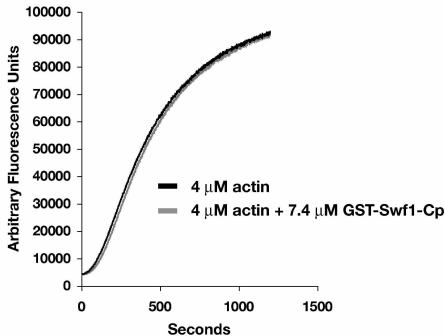


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**Supplemental
Figure 2**

A**B****Supplemental Figure 3**