Figure S1. Bnr1p FH1-FH2-COOH rescues *bni1*Δ *bnr1*Δ lethality under stressful conditions. Equivalent dilutions of *bni1*Δ *bnr1*Δ cells expressing Bni1p, Bnr1p, or Bnr1p FH1-FH2-COOH were spoted on YPD and incubated for seven days at 14 ˚C, four days at 26 ˚C or two days at 37 ˚C, or spotted onto YPD+1M NaCl or 1.5M sorbitol and incubated at 26 ˚C for five days.

Figure S2. Cytokinesis is not compromised in cells expressing a delocalized formin and a headless myosin II. *bni1*Δ *BNR1, pGFP-MYO1,* or *bni1*Δ *BNR1, pGFP-MYO1T* and *bni1*Δ *BNR1 FH1-FH2-COOH, pGFP-MYO1* or *bni1*Δ *BNR1 FH1-FH2-COOH, pGFP-MYOT* cells were digested with zymolyase as described (Lippincott and Li, 1998a) and then counted as cells with one or two cell bodies (no cytokinesis defect) or cells with more than two cell bodies (cytokinesis defect).

Figure S3. *bni1*Δ *bnr1*Δ cells expressing Bnr1p FH1-FH2-COOH does not accumulate internal Bgl2p. External and internal proteins of *bni1*Δ *bnr1*Δ cells expressing either Bni1p, Bnr1p or Bnr1p FH1-FH2-COOH were subjected to western blotting with Bgl2p antiserum. The resulting intensity was normalized against Tpm1p levels.

Video 1. GFP-Sec4p particles in *bni1*Δ *bnr1*Δ cells expressing Bnr1p FH1-FH2-COOH. Cells were imaged at a rate of 5 frames per second for 15 seconds.

Figure S1

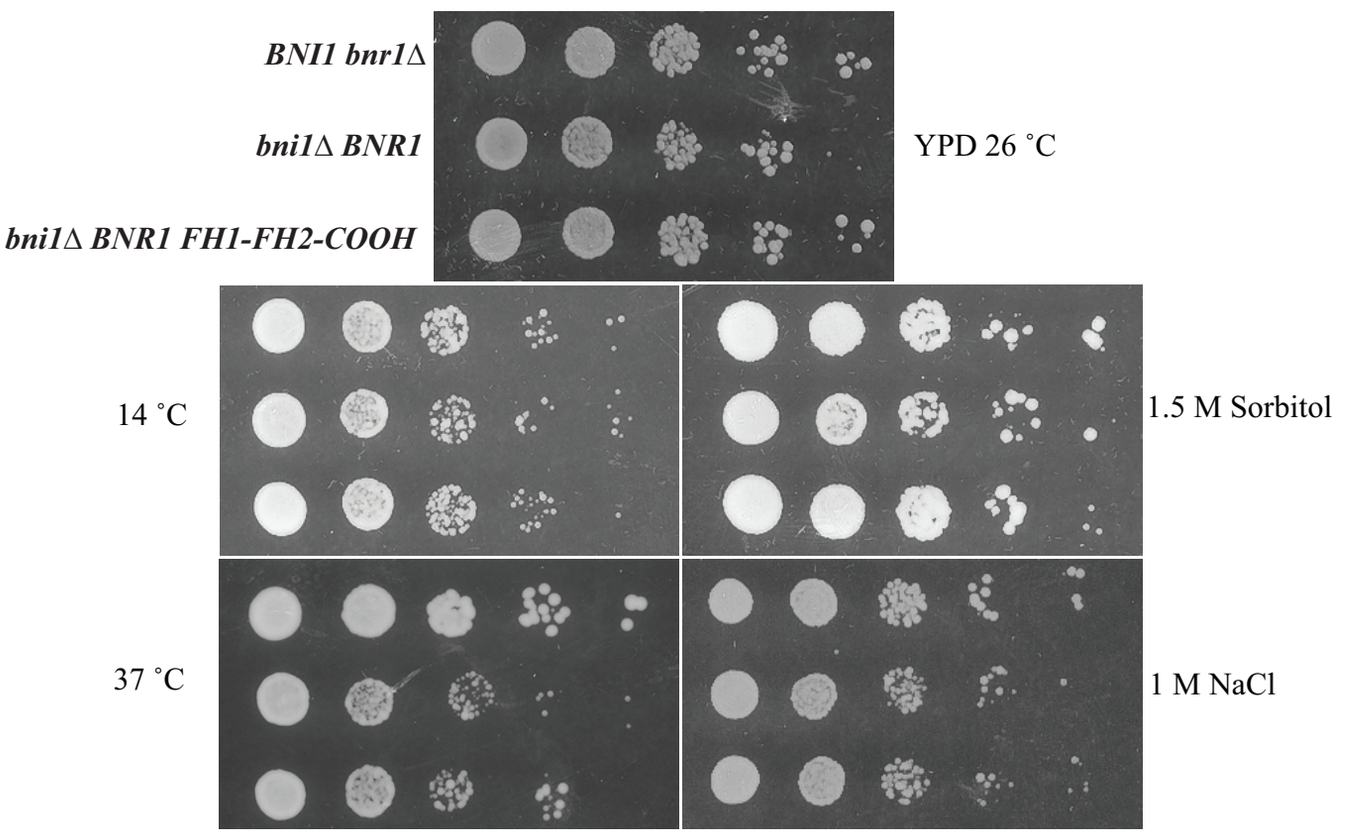

BNI1 bnr1Δ
bni1Δ BNR1
bni1Δ BNR1 FH1-FH2-COOH
YPD 26 ˚C
14 ˚C
1.5 M Sorbitol
37 ˚C
1 M NaCl

Figure S2

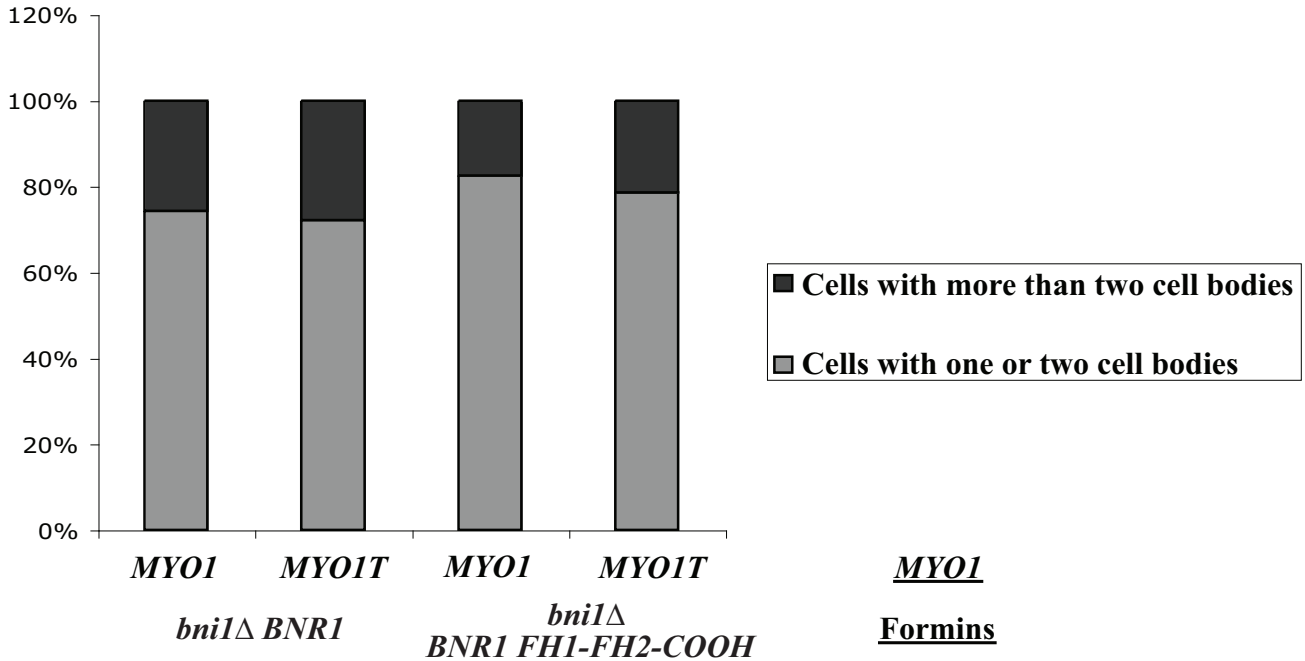
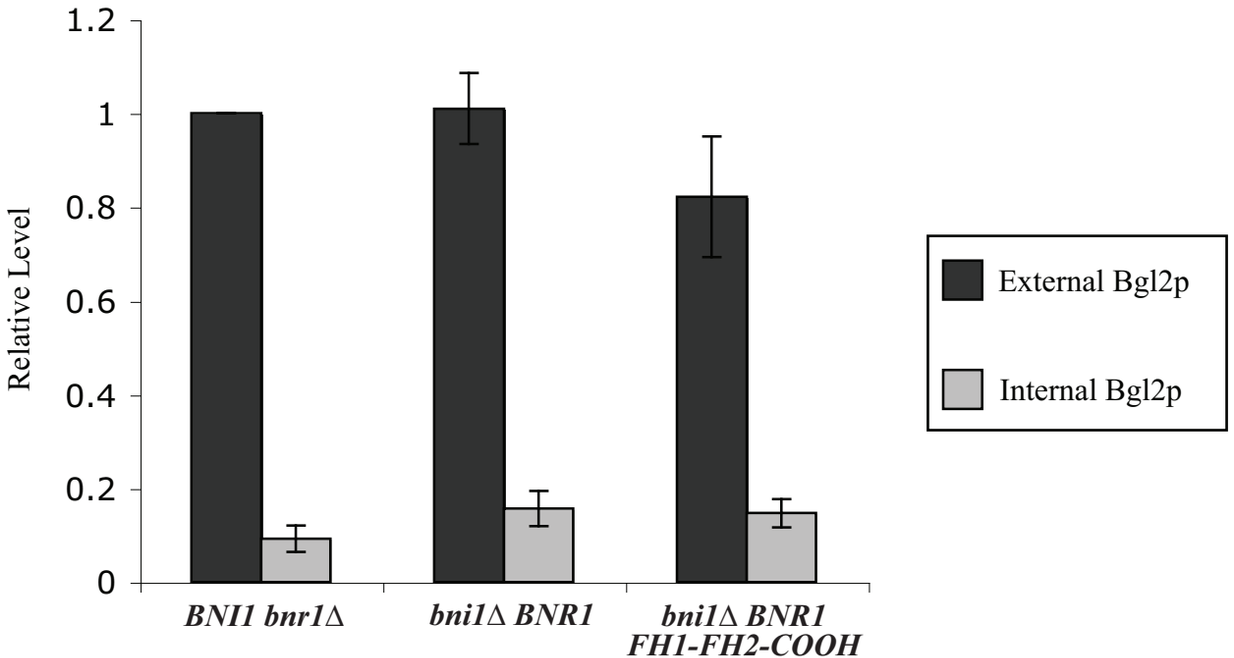

120%
100%
80%
60%
40%
20%
0%
MYO1
MYO1T
MYO1
MYO1T
bni1Δ BNR1
bni1Δ
BNR1 FH1-FH2-COOH
Cells with more than two cell bodies
Cells with one or two cell bodies
MYO1
Formins

Figure S3


1.2
1
0.8
0.6
0.4
0.2
0
Relative Level
External Bgl2p
Internal Bgl2p
BNI1 bnr1Δ
bni1Δ BNR1
bni1Δ BNR1 FH1-FH2-COOH