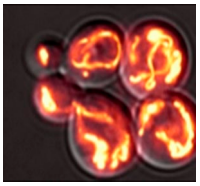
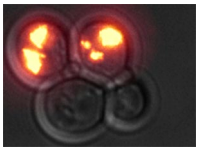
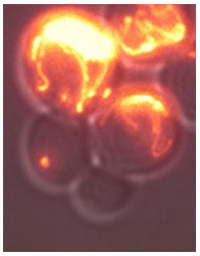
Böckler et al., https://doi.org/10.1083/jcb.201611197



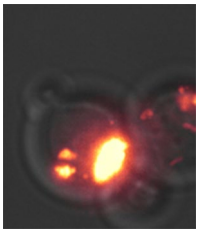
Video 1. **WT cells expressing mtGFP were cultured to logarithmic growth in glucose-containing selective complete medium at 25°C, incubated at 37°C for 20 min, and analyzed for 1 h by time-resolved 3D fluorescence microscopy at 37°C.** Cells were constantly supplied with fresh glucose-containing rich medium and imaged in 2-min intervals by taking z stacks of differential interference contrast and mtGFP fluorescence. The video shows 3 frames per second, accordingly 10 s of video time equal 1 h of real time. One focal plane of the differential interference contrast is merged with a maximum intensity projection of fluorescence signal.



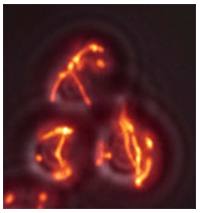
Video 2. ***fzo1-1*** **cells were analyzed as in Video 1.**



Video 3. ***myo2(LQ)*** **cells were analyzed as in Video 1.**

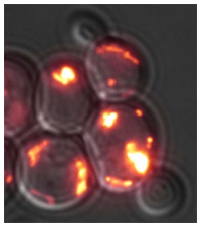


Video 4. ***myo2(LQ) fzo1-1*** **cells were analyzed as in Video 1.**

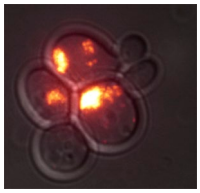


Video 5. **WT cells expressing mtGFP were cultured to logarithmic growth in glucose-containing selective complete medium at 30°C.** Cells were analyzed for 1 h by time-resolved 3D fluorescence microscopy as in Video 1, with the exception that the temperature was 30°C.

Video 6. **Δ*mmr1* cells were analyzed as in Video 5.**



Video 7. **Δ*fzo1* cells were analyzed as in Video 5.**



Video 8. **Δ*fzo1* Δ*mmr1* cells were analyzed as in Video 5.**

Tables S1–S4 are available as Excel files.
Table S1 lists genes and genetic interaction scores from two independent SGA screens of the *MAT*a yeast deletion collection with *myo2(LQ)*.
Table S2 lists genes that negatively interacted with *myo2(LQ)* in SGA screens.
Table S3 lists yeast strains used in this study.
Table S4 details data pooling and statistics.