Supplementary Fig. 1

Golgi apparatus regeneration monitored in BY-2 cells expressing ST-GFP. A. The size of Golgi stacks (expressed as the diameter of fluorescent punctae) was determined in the CLSM with the help of the Image J program for cells at different times during BFA washout. B. Individual images (3-D projections) of cells at different periods before BFA application, after BFA application and at various times during recovery from BFA treatment (A: control without application of BFA; B: 60 min regeneration; D: 120 min regeneration; E: 180 min regeneration; F: 240 min regeneration)

Supplementary Fig. 2

A –D. Individual budding profiles on the ER of BY-2 cells recovering (20 min) from BFA treatment. In order to enhance contrast, the sections were stained wirth a 1 % KMnO₄ solution for 1 min.

Supplementary Fig. 3

Disruption of cytoskeletal elements in protoplasts from BY-2 cells. A. The microtubule cytoskeleton in control cells as visualized by immunofluorescence with anti-alpha tubulin B. BY-2 protoplasts treated with oryzalin (10 μ M). C. The actin cytoskeleton in control protoplasts as visualized by GFP-talin. D. BY-2 protoplasts treated with latrunculin (2 μ M).

Supplementary Fig. 4

Fluorescein diacetate vitality tests for DMSO and H-89 on BY-2 cells. Standard treatment time was 120 min.