A. **B.**

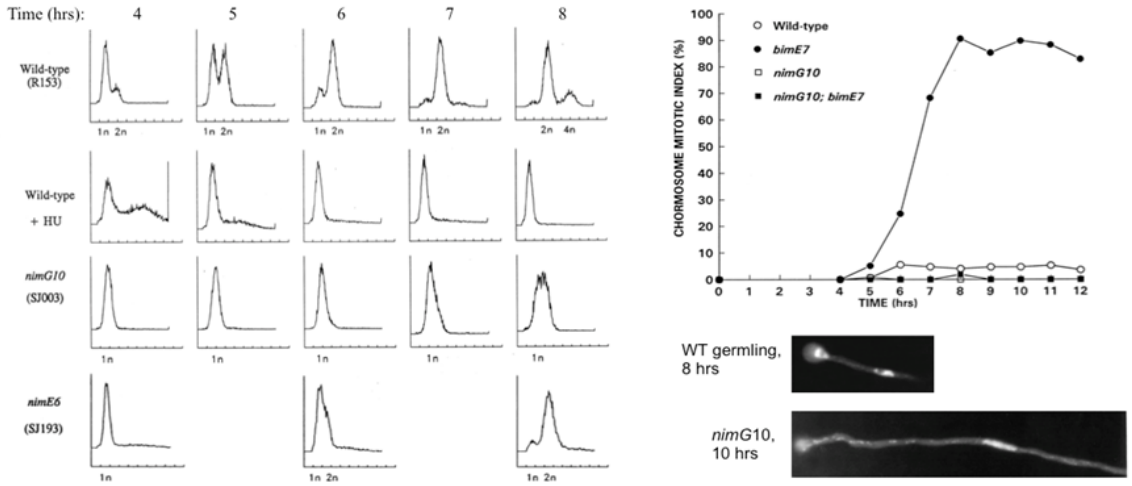

Figure S1 *nimE*10^{CYCLINB} arrests in S phase. (A) Flow cytometric analysis of DNA content of *nimE*10^{cyclinB} (formerly *nimG*10) and *nimE*6^{cyclinB} cells. Conidia were germinated at 44°. For comparison with mutants, wild-type cells were germinated in the absence or presence of the DNA synthesis inhibitor hydroxyurea (HU, 50 mM). Samples were withdrawn hourly (WT and SWJ 003) or every other hour (SWJ 193) beginning at 4 hours, fixed in ethanol, and stained with propidium iodide as described in James *et al*. (1995). Linear fluorescence histograms show relative DNA content in arbitrary units on the horizontal axis, and the cell number on the vertical axis. Each histogram is based on counts of 10,000 cells. (B) Chromosome mitotic index and nuclear morphology of the *nimE*10^{cyclinB} mutant at restrictive temperature. Conidia were germinated at 44° for 12 hours in Kafer's minimal medium. Beginning at 4 hours, samples were taken hourly and fixed and stained with DAPI to determine nuclear number and chromosome mitotic index, as described in James *et al*. (1995). For each sample, at least 150 individual cells were scored at 100x magnification on a Zeiss Axioplan or Nikon Optiphot photomicroscope equipped with epifluorescence optics. ○, Wild type (R153); ●, *bimE*7 (SWJ 010); □, *nimE*10 (SWJ 1614); ■, *nimE*10 *bimE*7 (SWJ 144). Photomicrographs depict a representative wild-type cell harboring two interphase nuclei, each with a single nucleolus, after 8 hours of germination at 44°; and a representative *nimE*10 cell arrested at the restrictive temperature with a single interphase nucleus lacking a nucleolus (x1350 magnification), after germination for 10 hours. Note the elongated hypha and multiple mitochondrial DNAs, indicated by the small bright dots distributed through the cell.