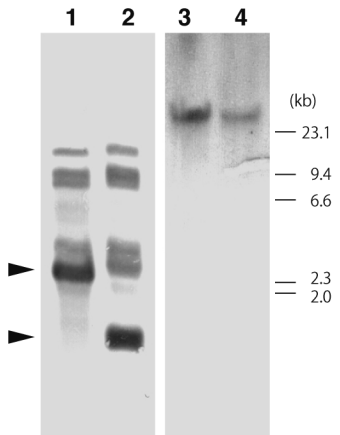

Fig. S1. Genomic Southern hybridization of wild-type and cmcax^{-} strains. The corresponding region of cmcax was used as a probe DNA fragment and labeled with a digitonin. (Lane 1) *Cla*I and *Hin*cII-cleaved genomic DNA of the cmcax^{-} strain. (Lane 2) *Cla*I and *Hin*cII-cleaved genomic DNA of the wild-type strain. (Lane 3) Noncleaved genomic DNA of the cmcax^{-} strain. (Lane 4) Noncleaved wild-type genomic DNA. Arrowheads show the positions of fragments containing cmcax. A DNA size marker (digested by λ-*Hin*d III) is shown in the right.

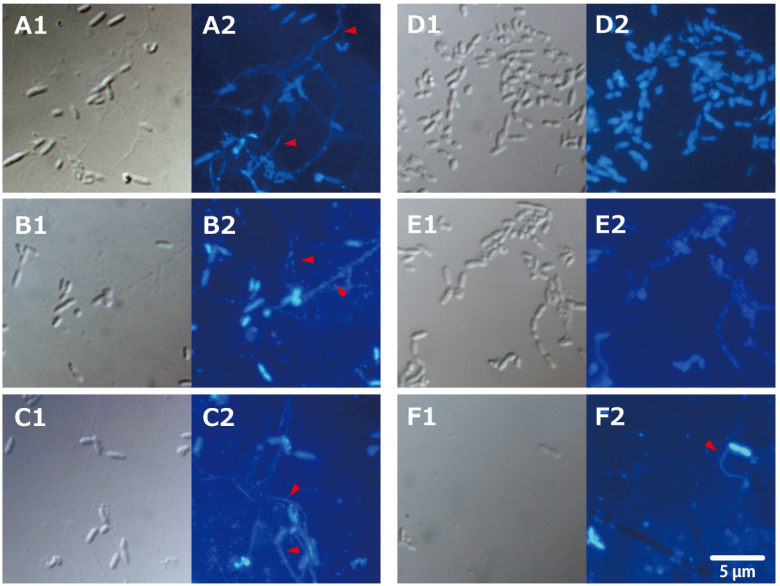

Fig. S2. Calcofluor White staining of wild-type and cmcax^{-} strains. Formaldehyde-fixed cells were stained with Calcofluor White M2R. (A–C) Three different views of Calcofluor White-stained wild-type cells. (D–F) Three different views of Calcofluor White-stained cmcax^{-} cells. Differential interference contrast views (A1-F1) and fluorescent views (A2-F2) of Calcofluor White-stained cells. A1-F1 and A2-F2 are in the same optical fields. These observations were independently carried out. In the wild-type strain, cellulose fibrils showing Calcofluor White fluorescence are frequently seen (A–C). In the cmcax^{-} strain, cells tended to aggregate and we could rarely detect cellulose fibrils stained with Calcofluor White M2R in these aggregated cells (D and E). However, some isolated cells, i.e., in the optical fields with low cell densities, contained fibrils stained with Calcofluor White M2R (F, arrow). Scale bar, 5 µm.