Microtubules are conserved cytoskeletal elements that form by the polymerization of alpha- and beta-tubulin heterodimers. The formation of polymerization-competent tubulin heterodimers requires that alpha-tubulin and beta-tubulin are properly folded. Specific cofactors are required for the folding of alpha- and beta-tubulin in vitro and homologs of these cofactors have been found in many organisms, including S.cerevisiae. In S.cerevisiae, CIN1 is a non-essential gene that encodes the homolog of mammalian cofactor D 4, 1, 3, 2. In vitro, cofactor D acts in the beta-tubulin folding pathway and forms a quaternary complex with cofactor E, and alpha- and beta-tubulin, to make polymerization-competent tubulin heterodimers 2. Consistent with the in vitro studies, Cin1p has been shown to physically interact with Pac2p 5 and beta-tubulin6. Overexpression of CIN1 can suppress the benomylsensitivity of a pac2 null mutant 5 and cin1 mutants have allele-specific synthetic phenotypes in combination with tubulin mutants 7, 1. CIN1 was isolated in a genetic screen for mutants that displayed super-sensitivity to benomyl 1, and independently isolated in a genetic screen for elevated chromosome loss 3. cin1 null mutants are cold-sensitive and have defects in nuclear migration and nuclear fusion 1, 3.