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 be 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 numerous organisms, including S. cerevisiae. In S. cerevisiae, CIN2 is a non-essential gene that is homologus to tubulin cofactor C 1, 5, 4. Cofactor C acts in vitro to release the functional tubulin heterodimer from a quaternary tubulin folding complex containing alpha- and beta-tubulin, cofactor Dand cofactor E4. Consistent with the in vitro studies, CIN2 has been shown to genetically interact with specific tubulin mutants, and the tubulin cofactors CIN1, RBL2 and PAC2 1, 7, 8. Cin2p interacts in the two-hybrid assay with Cin4p 8, an arf-family GTPase and proposed regulator of the cofactor pathway 1, 5, 9. CIN2 was isolated in a genetic screen for mutants that display benomylsuper-sensitivity 1, and independently isolated in a genetic screen for elevated chromosome loss 5. cin2 null mutants are cold-sensitive and have defects in nuclear migration and nuclear fusion 1, 5.