CDC16) is an essential member of the anaphase-promoting complex, an E3 ubiquitin ligase in the ubiquitin-mediated proteolysis pathway. This protein contains tetratrico peptide repeats, a protein-protein interaction motif. The APC ubiquitin ligase helps regulate the metaphase/anaphase transition and exit from mitosis/G1 entry through ubiquitination of various substrates. These include mitotic cyclins, the sister chromatid separation inhibitor Pds1p, the Kip1p and Cin8p motor proteins, Cdc5p, and the spindle disassembly factor, Ase1p. Cdc16p interacts with two other essential APC subunits, Cdc23p and Cdc27p. Several temperature-sensitive mutants of CDC16 arrest as large-budded cells with the nucleus at the neck and are defective in the ubiquitination of Clb2p at non-permissive temperature. The cdc16-183 mutant displays a metaphase arrest at non-permissive temperature but is also super-sensitive to nocodazole. The human homologue, CDC16Hs, has been localized to the centrosomes and the mitotic spindle. Many thanks to Patricia Melloy for writing this gene summary.