Ubiquitin conjugating enzymes, also known as E2 enzymes and more rarely as ubiquitin-carrier enzymes, perform the second step in the ubiquitination reaction that targets a protein for degradation via the proteasome. The ubiquitination process covalently attaches ubiquitin, a short protein of 76 amino acids, to a lysine residue on the target protein. Once a protein has been tagged with one ubiquitin molecule, additional rounds of ubiquitination form a polyubiquitin chain that is recognized by the proteasome's 19S regulatory particle, triggering the ATP-dependent unfolding of the target protein that allows passage into the proteasome's 20S core particle, where proteases degrade the target into short peptide fragments for recycling by the cell.

see UBE2C.