ENA2 is the second member of a tandem array of genes encoding nearly, but not perfectly, identical P-Type ATPases. The reference strain, S288c, contains three genes in this cluster: ENA1, ENA2, and ENA5. Other Saccharomyces strains typically contain 4 or 5 genes.ENA1 is the most well characterized member of this cluster and is thought to encode the primary plasma membrane Na+-ATPase exporter in S. cerevisiae. Ena1p plays a critical role in the detoxification of Na+ ions and in maintaining ion homeostasis, making Ena1p a principal component of the cell's ability to survive high salt or alkaline conditions. Ena1p and Ena2p both transport Li+ ions, but with differing efficiencies, and have been shown to export K+ ions concomitantly with Na+, at some salt concentrations.Ena1p-Ena5p are closely related to Pmr1p, the Golgi membrane Ca2+-ATPase. Mutations in the human homolog of Pmr1p, ATP2C1, cause the acantholytic skin condition Hailey-Hailey disease.