

# Download Mechanisms Of Intracellular Trafficking And Processing Of Proteins

This article deals with protein targeting in eukaryotes except where noted.. Protein targeting or protein sorting is the biological mechanism by which proteins are transported to their appropriate destinations in the cell or outside it. Proteins can be targeted to the inner space of an organelle, different intracellular membranes, plasma membrane, or to exterior of the cell via secretion. The Rho family of GTPases is a family of small (~21 kDa) signaling G proteins, and is a subfamily of the Ras superfamily. The members of the Rho GTPase family have been shown to regulate many aspects of intracellular actin dynamics, and are found in all eukaryotic kingdoms, including yeasts and some plants. Three members of the family have been studied in detail: Cdc42, Rac1, and RhoA. Although biological membranes contain various types of lipids and proteins, their distribution between the two different sides of the bilayer is asymmetric.

## 1. Introduction.

The endoplasmic reticulum (ER) is the central intracellular organelle in the secretory pathway. It is responsible for protein translocation, protein folding, and protein post-translational modifications that allow further transport of proteins to the Golgi apparatus and ultimately to vesicles for secretion or display on the plasma surface.