

Morin et al. Legends to video 1-3, Supplemental material

Video 1 :

MDCK cell co-expressing GDI3-mCherry (red) and EGFP-RhoG (green): Compared to the cell shown in Video 2 this cell contains more of the less dynamic vesicular structures defined by the two proteins (yellow). Videos 1 to 3 are three examples of co-transfected MDCK cells found in the same experiment.

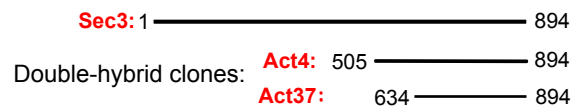
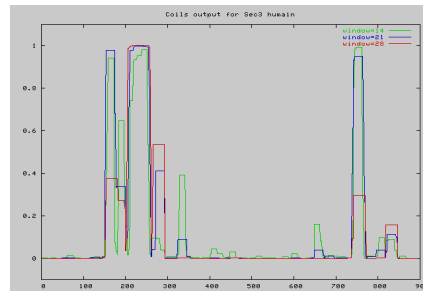
Video 2 :

MDCK cell expressing GDI3-mCherry (red) and EGFP-RhoG (green): In the right upper corner of the movie a second cell is partly seen. Note that GDI3-mCherry and EGFP-RhoG defines highly dynamic globular transport carriers while transport elements defined by both proteins (yellow) are bigger and less dynamic. The plasma membrane shows only RhoG-positive structures (green).

Video 3 :

A MDCK cell showing co-localizations (yellow) of GDI3-mCherry and EGFP-RhoG at the tubulo-vesicular structures of the perinuclear Golgi apparatus (arrow).

Morin et al. Figure 1: The N-terminal domain of GDI3 interacts with a C-terminal coiled-coil domain of human Sec3



Nt^{GDI3}-FBL23 encompassing the GDI3 specific helix interacts with a C-terminal coiled-coiled domain in human Sec3

N-terminal and C-terminal coiled-coil domains of human Sec3 as predicted by the Coils program of A. Lupas et al.¹. The shortest clone, Act 37 (261 amino acids in length), interacting with Nt^{GDI3}-FBL23 in the yeast two-hybrid mating assay (Table 1) encompasses a predicted coiled-coil domain at the C-terminus of human Sec3.

1. Lupas A, Van Dyke M, Stock J. Predicting Coiled Coils from Protein Sequences. Science 1991; 252:1162-4.