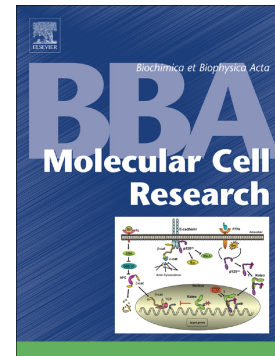


Accepted Manuscript

Rab and Arf proteins at the crossroad between membrane transport and cytoskeleton dynamics

Ingrid Kjos, Katharina Vestre, Noemi Antonella Guadagno, Marita Borg Distefano, Cinzia Progida



PII: S0167-4889(18)30170-8
DOI: doi:[10.1016/j.bbamcr.2018.07.009](https://doi.org/10.1016/j.bbamcr.2018.07.009)
Reference: BBAMCR 18317
To appear in: *BBA - Molecular Cell Research*
Received date: 26 March 2018
Revised date: 5 July 2018
Accepted date: 13 July 2018

Please cite this article as: Ingrid Kjos, Katharina Vestre, Noemi Antonella Guadagno, Marita Borg Distefano, Cinzia Progida , Rab and Arf proteins at the crossroad between membrane transport and cytoskeleton dynamics. Bbamcr (2018), doi:[10.1016/j.bbamcr.2018.07.009](https://doi.org/10.1016/j.bbamcr.2018.07.009)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Rab and Arf proteins at the crossroad between membrane transport and cytoskeleton dynamics

Ingrid Kjos¹, Katharina Vestre¹, Noemi Antonella Guadagno¹, Marita Borg Distefano¹, Cinzia Progida^{1*}

¹Department of Biosciences, University of Oslo, Norway

*Corresponding author: Cinzia Progida, c.a.m.progida@ibv.uio.no

Keywords: small GTPases, Rab, Arf, Vesicular transport, Actin, Microtubule

Abstract

The intracellular movement and positioning of organelles and vesicles is mediated by the cytoskeleton and molecular motors. Small GTPases like Rab and Arf proteins are main regulators of intracellular transport by connecting membranes to cytoskeleton motors or adaptors. However, it is becoming clear that interactions between these small GTPases and the cytoskeleton are important not only for the regulation of membrane transport. In this review, we will cover our current understanding of the mechanisms underlying the connection between Rab and Arf GTPases and the cytoskeleton, with special emphasis on the double role of these interactions, not only in membrane trafficking but also in membrane and cytoskeleton remodeling. Furthermore, we will highlight the most recent findings about the fine control mechanisms of crosstalk between different members of Rab, Arf, and Rho families of small GTPases in the regulation of cytoskeleton organization.

Download English Version:

<https://daneshyari.com/en/article/8303601>

Download Persian Version:

<https://daneshyari.com/article/8303601>

[Daneshyari.com](https://daneshyari.com)