

SORTING AND RECYCLING ENDOSOMES

Edited by

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Endosomes not only serve as a receiving compartment for proteins endocytosed from cell surface, but also function as a donor compartment and sorting station for cargos designated to lysosomes, Golgi, and plasma membrane. The aim of this volume is to bring together specialists from the field to contribute their expertise to a broad range of biomedical researchers interested in endosomal sorting and recycling. Topics focus upon; the Rab family of small GTPases; approaches studying the Arf GTPases as they control the generation of tubular vesicular carriers from the endosomes; methods to study the proteins and lipids that control membrane morphology and dynamics; methods to study the actin polymerization machinery and microtubule-based transport during endosomal trafficking; studies of epithelial cells; protocols to investigate the various routes of protein transport from endosomes; and studies that link endosomal trafficking and signaling.

KEY FEATURES

- Contributions from leading experts in this specialized field of research.
- Methods and protocols for approaches to study the key components mediating the generation and transport of membrane-bounded carriers from the endosomes, and how membrane trafficking machinery is coordinated with cytoskeletons during these processes.

Cover image: Tubular Recycling Endosomes. MICAL-L1 (red) and GFP-EHD3 co-localize on the membranes of tubular recycling endosomes, as visualized by super-resolution Structured Illumination Microscopy.

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