

1. Record Nr.	UNINA9910737299203321
Titolo	Endocytosis and Signaling [[electronic resource] /] / edited by Christophe Lamaze, Ian Prior
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-96704-5
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (332 pages)
Collana	Progress in Molecular and Subcellular Biology, , 0079-6484 ; ; 57
Disciplina	571.6
Soggetti	Cell membranes Cell physiology Cell cycle Proteins Membrane Biology Cell Physiology Cell Cycle Analysis Protein Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- The endosomal network: mediators and regulators of endosome maturation -- Integration of the endocytic system into the network of cellular functions -- GTPases Rac1 and Ras signaling from endosomes -- ESCRT and membrane protein ubiquitination -- Retromer and it's role in regulating signaling at endosomes -- The lysosome and intracellular signaling -- Interplay of endocytosis and growth factor receptor signaling -- Role of the endocytosis of caveolae in intracellular signaling and metabolism -- EGFR trafficking in physiology and cancer -- Evolving view of membrane trafficking and signaling systems for G protein-coupled receptors -- Endosomal trafficking during mitosis and Notch-dependent asymmetric division.
Sommario/riassunto	This book focuses on the context dependency of cell signaling by showing how the endosomal system helps to structure and regulate signaling pathways. The location and concentration of signaling nodes regulate their activation cycles and engagement with distinct effector

pathways. Whilst many cell signaling pathways are initiated from the cell surface, endocytosis provides an opportunity for modulating signaling networks' output. In this book, first a series of reviews describe the endocytic and endosomal system and show how these subcellular platforms sort and regulate a wide range of signaling pathway components and phenotypic outputs. The book then reviews the latest scientific insights into how endocytic trafficking and subcellular location modulate a set of major pathways that are essential to normal cellular function and organisms' development. .
