

1. Record Nr.	UNINA9910739430703321
Titolo	Vesicle trafficking in cancer // Yosef Yarden, Gabi Tarcic, editors
Pubbl/distr/stampa	New York, : Springer, 2013
ISBN	1-4614-6528-1
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (393 p.)
Disciplina	616.99 616.99/4 616.994071
Soggetti	Endocytosis Coated vesicles
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Preface -- Clathrin Mediated Endocytosis -- Intimate And Facultative? Regulation Of Clathrin-Mediated Endocytosis By The Actin Cytoskeleton -- Oncogenic Signaling From The Plasma Membrane -- Endocytosis In The Spatial Control Of Polarized Cell Functions -- Aberrant Vesicular Trafficking Contributes To Altered Polarity And Metabolism In Cancer -- Endocytosis And The Regulation Of Cell Signaling, Cell Adhesion, And Epithelial To Mesenchymal Transition In Cancer -- Efficient Enhancement Of Signaling Capacity: Signaling Endosomes -- Nuclear Functions And Trafficking Of Receptor Tyrosine Kinases -- Efficient Enhancement Of Signaling Capacity -- The Ubiquitin System.- Molecular Mechanism Of Ubiquitin-Dependent Traffic -- Cbl As A Master Regulator Of Receptor Tyrosine Kinase Trafficking -- Regulation Of Endocytic Trafficking And Signaling By Deubiquitylating Enzymes -- RTKs As Models For Trafficking Regulation - C-Met/HGF-Receptor- C-Met Signalling In Cancer: Location Counts -- Regulation Of Epidermal Growth Factor Receptor Signaling By Endocytosis In Normal And Malignant Cells -- Stress-Driven Endocytosis Of Tyrosine-Phosphorylated EGFR Leads To Tumorigenesis: The Critical Role Of Oxidative Stress -- Internalisation, Endosomal Trafficking And Recycling Of Integrins During Cell Migration And Cancer Invasion -- Antibody-mediated receptor endocytosis: Harnessing the cellular

machinery to combat cancer -- Index.

---

## Sommario/riassunto

Endocytosis and vesicular trafficking determine the landscape of the cell's exterior, namely the density of surface molecules, such as receptors for growth factors and cytokines, adhesion molecules like integrins and cadherins, and a plethora of nutrient carriers. Hence, endocytosis is involved in signal transduction, cell adhesion and migration, as well as metabolism. To exploit these fundamental processes, malignancies subtly and multiply manipulate the endocytosis and the subsequent trafficking of protein cargoes. This is achieved by simultaneously altering the cytoskeleton, vesicle budding, cargo sorting and intracellular degradation. By highlighting the underlying molecular processes and concentrating on specific examples, this book reviews the recent emergence of derailed endocytosis and vesicular trafficking as a landmark of cancer. In-depth understanding of this common feature of tumors might lead the way to drug-induced strategies, able to rectify intracellular trafficking in cancer.

---