1. Record Nr. UNINA9910559393403321

Titolo	Macropinocytosis : Functions and Mechanisms / / edited by Cosimo Commisso
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	9783030940041 9783030940034
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (227 pages)
Collana	Subcellular Biochemistry, , 2542-8810 ; ; 98
Disciplina	571.6
Soggetti	Cytology Biophysics Cell interaction Biological transport Cell membranes Medicine - Research Biology - Research Cell Biology Mechanobiological Cell Signaling Membrane Trafficking Biomedical Research Citologia Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Part 1: Functions of Macropinocytosis -- Chapter 1: Functional Diversity of Macropinocytosis -- Chapter 2: Macropinocytosis and Cancer: From Tumor Stress to Signaling Pathways -- Chapter 3: The amoebal model for micropinocytosis -- Chapter 4: Extracellular ATP and macropinocytosis -- Chapter 5: Macropinocytosis and Cell Migration: Don't drink an drive -- Chapter 6: Macropinocytosis in phagocyte function and immunity -- Part 2: Signaling Mechanisms Driving Macropinocytosis -- Chapter 7: Roles of 3' Phosphoinositides in

Macropinocytosis -- Chapter 8: Signaling pathways that regulate macropinocytosis in mammalian cells -- Chapter 9: Wnt, GSK3 and Macropinocytosis -- Chapter 10: Kras addiction promotes cancer cell adapation in harsh microenvironment through micropinocytosis -- Chapter 11: Kras-independent macropinocytosis in pancreatic cancer.

Sommario/riassunto

This book presents the functions and mechanisms of macropinocytosis, an actin-driven endocytic uptake process. Key points, including the evolutionary origins of macropinocytosis and major signaling pathways that regulate this uptake mechanism, are highlighted. A wide-array of functions of macropinocytosis are described, including cellular metabolism, cell death, cell migration and antigen presentation. Macropinocytosis has recently been recognized as a critical pathway in disease pathology and treatment. Therefore, a broad overview of macropinocytosis will benefit clinicians, as well as translational and basic research scientists. Moreover, as one of the main clathrin-independent endocytic routes, compiling all the critical information about macropinocytosis in one collection, this book will also be helpful to educators and their students.