1. Record Nr. UNINA9910863108703321

Titolo	Autophagy in tumor and tumor microenvironment / / edited by Sujit Kumar Bhutia
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-6930-4
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (VII, 280 p. 38 illus., 37 illus. in color.)
Disciplina	616.9940072
Soggetti	Cancer Immunology Medical microbiology Molecular genetics Stem cells Cell death Cancer Biology Medical Microbiology Molecular Genetics Stem Cell Biology Cell Death
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Role of xenobiotic in autophagy inflection in cell death and carcinogenesis -- Chapter 2. Autophagy – An agonist and antagonist with an interlink of apoptosis in cancer -- Chapter 3. Cross-talk between DNA damage and autophagy and its implication in cancer therapy -- Chapter 4. miRNAs and its regulatory role on autophagy in tumor microenvironment -- Chapter 5. Exploring the metabolic implications of autophagy modulation in tumor microenvironment -- Chapter 6. Mitophagy and Reverse Warburg Effect: Metabolic Compartmentalization of Tumor Microenvironment -- Chapter 7. Mitochondrial Biogenesis, Mitophagy, and Mitophagic cell death in Cancer Regulation: A Comprehensive Review -- Chapter 8. Mechanical stress-induced autophagy: a key player in cancer metastasis -- Chapter

9. The Interplay of Autophagy and the Immune system in the Tumor Microenvironment -- Chapter 10. Relevance of autophagy in cancer stem cell and therapeutic -- Chapter11. The Autophagy Conundrum in Cancer Development, Progression and Therapeutics -- Chapter 12. Targeting Autophagy in Cancer: Therapeutic implications -- Chapter 13. Mechanistic insights into Autophagosome-Lysosome Fusion in Cancer Therapeutics.

Sommario/riassunto

This book deals with the paradoxical role of autophagy in tumor suppression and tumor promotion in cancer cells. Autophagy plays opposing, context-dependent roles in tumors; accordingly, strategies based on inhibiting or stimulating autophagy could offer as potential cancer therapies. The book elucidates the physiological role of autophagy in modulating cancer metastasis, which is the primary cause of cancer-associated mortality. Further, it reviews its role in the differentiation, development, and activation of multiple immune cells, and its potential applications in tumor immunotherapy. In addition, it examines the effect of epigenetic modifications of autophagy-associated genes in regulating tumor growth and therapeutic response and summarizes autophagy's role in the development of resistance to a variety of anti-cancer drugs in cancer cells. In closing, it assesses autophagy as a potential therapeutic target for cancer treatment. Given its scope, the book offers a valuable asset for all oncologists and researchers who wish to understand the potential role of autophagy in tumor biology.