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Descrizione fisica	1 online resource (193 pages) : illustrations (black and white, and color)
Collana	Biology of Extracellular Matrix, , 2191-1959 ; ; 14
Disciplina	354.81150006 612.01578
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter 1: Biochemistry of hyaluronan synthesis -- Chapter 2: Update on hyaluronan in development -- Chapter 3: Long non-coding RNAs and epigenetic regulation of hyaluronan synthesis -- Chapter 4: The hyaluronan-rich zones of plasma membrane protrusions and extracellular vesicles -- Chapter 5: Hyaluronan in Kidney Fibrosis -- Chapter 6: Inter--inhibitor proteins: A review of structure and function -- Chapter 7: CD44: Does CD44v6 adversely impact the prognosis of cancer patients? -- Chapter 8: The pharmacokinetics and pharmacodynamics of 4-methylumbelliferone and its glucuronide metabolite in mice -- Chapter 9: The role of hyaluronan in skin wound healing -- Chapter 10: Sulfated hyaluronan: a novel player in cancer therapeutic and bioengineering approaches.

Sommario/riassunto

This book addresses the structural and biological properties of the extracellular matrix component and glycosaminoglycan polymer hyaluronan (or hyaluronic acid, HA). The book discusses various aspects of HA biology, e.g., HA synthesis and degradation, as well as the role of HA in embryogenesis, development, and cell maintenance. The reader will learn about the role of HA in different tissues as well as its biological activities triggered by the interaction with different HA receptors. A closer look is had at the involvement of HA in human pathologies such as cancer, kidney fibrosis and wound healing. Biotechnological and biomedical applications for HA such as scaffold generation and drug delivery, including the novel synthetic sulphated HA are explored. This work will appeal to a wide readership within the extracellular matrix and hyaluronan field. It can serve as an introduction to the field for junior scientists but can also help senior scientists to gain a broader view of the field beyond their area of specialization. The series *Biology of Extracellular Matrix* is published in collaboration with the American Society for Matrix Biology and the International Society for Matrix Biology.
