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Nota di contenuto	Chapter 1. An Introduction to Cell Signalling pathways and their Dysregulation in cancer -- Chapter 2. Involvement of Mitogen activated protein (MAP) Kinase pathway in the etiopathogenesis of cancer and its role in cancer therapeutics -- Chapter 3. Association of PI3K/AKT/mTOR pathway with cancer and its therapeutic implications -- Chapter 4. Role and therapeutic implication of Hedgehog signalling pathway in cancer -- Chapter 5. Hippo LATS pathway in cancer and its role as a potential target for anti-cancer drugs -- Chapter 6. Role and therapeutic implication of Notch signalling pathway in cancer -- Chapter 7. Role and therapeutic implication of Wnt signalling pathway in cancer -- Chapter 8. Involvement and therapeutic implication of JAK-STAT pathway in cancer -- Chapter 9. Role of cAMP–PKA–CREB signalling pathway in cancer -- Chapter 10. Role and therapeutic implications of vitamin D signalling pathway in cancer -- Chapter 11. TGF- signalling pathway in cancer and its therapeutic role -- Chapter 12. Role of signaling pathways regulating cell cycle progression in cancer -- Chapter 13. Role of signaling pathways regulating genomic

stability in cancer.

Sommario/riassunto

This book discusses different signaling pathways involved in tumor development and progression. It discusses the pathways that allow tumor cells to proliferate, survive, and invade other tissues. Further, the book reviews the signal transduction regulating phagocytosis, production of cytokines, cell division, and differentiation. It elucidates the dysregulation of cellular signal transduction induced by the genetic and epigenetic changes that drive cancer and enumerates the signaling network encompassing the extracellular matrix, blood vessels, and the immune system. Additionally, the book provides mechanistic insights into inhibitors of the receptor tyrosine kinases, BRAF, EGFR, and ALK that improve clinical response and increase the survival of patients with cancer. The book covers the signal transduction pathways that regulate cell cycle progression and genomic stability, providing a mechanistic understanding of the major checkpoint pathways, and reviewing their diagnostic and therapeutic potential. This volume is essential reading for researchers to understand the therapeutic potential of important signaling molecules against cancer.