

1. Record Nr.	UNINA9910298283703321
Autore	Robert Jacques
Titolo	Textbook of Cell Signalling in Cancer : An Educational Approach // by Jacques Robert
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-14340-9
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (341 p.)
Disciplina	614.5999
Soggetti	Oncology Medicine Pharmacology Cytology Biomedicine, general Pharmacology/Toxicology Cell Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Growth Factors and Tyrosine Kinase Receptors -- MAP Kinases Pathway -- Phosphatidylinositol 3-Kinase Pathway -- Cytokine Pathway -- TGF Pathway -- G-proteins-coupled Receptors -- Wnt Pathway -- Notch Pathway -- Hedgehog Pathway -- Integrins -- Semaphorins and Adhesion Molecules -- Toll-like Receptors, Interleukin 1 (IL1) and NFB -- Lymphocyte Receptors Pathways -- Nuclear Receptors Pathways -- Ion Channels-coupled Receptors -- Signalling by Oxygen and Nitric Oxide -- Cell Cycle Control -- Apoptosis Induction and Regulation.
Sommario/riassunto	This book provides a simplified, yet comprehensive, overview of the signalling pathways operating between and inside cells, which will help younger oncologists find their way in the labyrinth of signalling pathways and in the multitude of signals and signal receptors, transducers and effectors that contribute to oncogenesis. This comprehensive reference text is based on the master's courses delivered by Prof. Jacques Robert to graduate students at the University of Bordeaux, France. It includes a large number of colour schemas and

figures that have been improved year after year for educational purposes. Signalling pathways are described individually and in depth, but without ignoring the multiplicity of interconnections and crosstalk. The presentation of each pathway is followed by a brief description of the alterations found in cancers as well as of the targeted pharmacological approaches that can be used to prevent or overcome the consequences of these oncogenic alterations. The basic mechanisms of molecular biology at the DNA replication, RNA transcription and protein activity levels are presented in a series of didactic annexes, enabling readers to better understand the alterations in signalling pathways.
