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Collana	Nucleic acids and molecular biology, , 0933-1891 ; ; v. 21
Altri autori (Persone)	HeineHolger
Disciplina	616.079
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Evolution of Resistance Genes in Plants -- The Path Less Explored: Innate Immune Reactions in Cnidarians -- Bug Versus Bug: Humoral Immune Responses in Drosophila melanogaster -- Cellular Immune Responses in Drosophila melanogaster -- Immune Reactions in the Vertebrates' Closest Relatives, the Urochordates -- Innate Immune System of the Zebrafish, Danio rerio -- Toll-Like Receptors in the Mammalian Innate Immune System -- NLRs: a Cytosolic Armory of Microbial Sensors Linked to Human Diseases -- Antimicrobial Peptides as First-Line Effector Molecules of the Human Innate Immune System -- The Complement System in Innate Immunity.
Sommario/riassunto	All living organisms are in a constant battle against their environment. Since uncontained microorganisms would simply overgrow all higher animals, the evolution of multicellular organisms required adequate and efficient defense mechanisms to protect their own integrity and to ensure their own survival. These defense mechanisms, encompassing receptor proteins that sense the presence of pathogens and effector molecules that are involved in controlling them, are the elemental parts of the innate immune system. For many species, the innate immune system is the sole active defense system. Long thought to be an unspecific immune response, the discovery of the Toll-like receptors and their ligands finally revealed just how specific the innate immune response actually is. This book wants to give an overview of our current knowledge about the innate immune system of plants, animals and

humans. It not only covers the innate immune mechanisms and responses of so diverse organisms such as plants, Cnidaria, Drosophila, urochordates and zebrafish, but also the major receptor systems in mammals and humans as well as the central defense mechanisms, antimicrobial peptides and the complement system.

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