

1. Record Nr.	UNINA9910784631103321
Autore	Mak Tak W. <1945->
Titolo	The immune response [[electronic resource] ] : basic and clinical principles // Tak W. Mak and Mary E. Saunders ; contributors, Maya R. Chaddah, Wendy L. Tamminen
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Elsevier/Academic, c2006
ISBN	1-281-11885-0 9786611118853 0-08-053448-1
Descrizione fisica	1 online resource (1217 p.)
Altri autori (Persone)	SaundersMary E., Ph.D. ChaddahMaya R TamminenWendy L
Disciplina	616.07/9 22 616.079
Soggetti	Immunology Immunity
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 and index.
Nota di contenuto	Front Cover; The Immune Response: Basic and Clinical Principles; Copyright Page; Preface; Biographies; Acknowledgments; Contents; Part I: Basic Immunology; Chapter 1. Perspective on Immunity and Immunology; A. What Is Immunology?; B. Why Have an Immune System and What Does It Do?; C. Types of Immune Responses: Innate and Adaptive; D. What Is "Infection"?; E. Phases of Host Defense; F. How Are Adaptive and Innate Immunity Related?; G. Leukocytes: Cellular Mediators of Immunity; H. Where Do Immune Responses Occur?; I. Clinical Immunology: When the Immune System Does Not Work Properly Chapter 2. Introduction to the Immune ResponseA. General Features of Innate Immunity; B. General Features of Adaptive Immunity; C. Elements of Immunity Common to the Innate and Adaptive Responses; D. Elements of Immunity Exclusive to the Adaptive Response; Chapter 3. Cells and Tissues of the Immune Response; A. Cells of the Immune System; B. Lymphoid Tissues; Chapter 4. Innate Immunity; A. Mechanisms of Innate Immunity; B. Pattern Recognition in Innate

Immunity; Chapter 5. B Cell Receptor Structure and Effector Function; A. Historical Notes; B. The Structure of Immunoglobulins C. Effector Functions of Antibodies D. Immunoglobulin Isotypes in Biological Context; Chapter 6. The Nature of Antigen-Antibody Interaction; A. The Nature of B Cell Immunogens; B. B Cell-T Cell Cooperation in the Humoral Immune Response; C. The Mechanics of Antigen-Antibody Interaction; Chapter 7. Exploiting Antigen-Antibody Interaction; A. Sources of Antibodies; B. Techniques Based on Immune Complex Formation; C. Assays Based on Unitary Antigen-Antibody Pair Formation; Chapter 8. The Immunoglobulin Genes; A. Historical Notes; B. Chromosomal Organization of Ig Genes; C. Ig Gene Rearrangement D. Molecular Mechanisms of Ig Gene Rearrangement E. Antibody Diversity Generated by Gene Rearrangement; F. Control Sequences in the Ig Loci; Chapter 9. The Humoral Response: B Cell Development and Activation; A. The Maturation Phase of B Cell Development; B. The Differentiation Phase of B Cell Development; Chapter 10. MHC: The Major Histocompatibility Complex; A. Historical Notes; B. General Aspects of the MHC in Humans and Mice; C. MHC Proteins; D. MHC Genes; E. Expression of MHC Molecules; F. Physiology of the MHC; Chapter 11. Antigen Processing and Presentation A. The Exogenous or Endocytic Antigen Processing Pathway B. The Endogenous or Cytosolic Antigen Processing Pathway; C. Other Pathways of Antigen Presentation; Chapter 12. The T Cell Receptor: Structure of Its Proteins and Genes; A. Historical Notes; B. The Structure of T Cell Receptor Proteins; C. Genomic Organization of the TCR and CD3 Loci; D. Expression of TCR Genes; E. Developmental Aspects of V (D)J Recombination in the TCR Loci; F. Generation of Diversity of the T Cell Receptor Repertoire; G. Regulation of TCR Gene Expression; H. Structure and Function of the CD3 Complex I. The CD4 and CD8 Coreceptors

## Sommario/riassunto

The Immune Response is a unique reference work covering the basic and clinical principles of immunology in a modern and comprehensive fashion. Written in an engaging conversational style, the book conveys the broad scope and fascinating appeal of immunology. The book is beautifully illustrated with superb figures as well as many full color plates. This extraordinary work will be an invaluable resource for lecturers and graduate students in immunology, as well as a vital reference for research scientists and clinicians studying related areas in the life and medical sciences.\* Cur