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Nota di contenuto	Front Cover; Antibody Fc: Linking Adaptive and Innate Immunity; Copyright Page; Contents; List of Contributors; 1. EFFECTOR MECHANISMS; 1 Antibody-Dependent Cellular Cytotoxicity (ADCC); Brief History of ADCC; Effector Cells; Receptors Involved; Mechanisms of ADCC; Recognition of the Target Cell and Cross-Linking of the Fc Receptor on the Effector Cell; Downstream Signals in the Effector Cell; Mechanisms of Killing; The Perforin/Granzyme Cell Death Pathway; The FAS-L Pathway; The ROS/ROI Pathway; ADCC Assays in Relation to Killing Mechanisms; ADCC in Monoclonal Antibody Therapy of Cancer Versatility of Monoclonal Antibodies as Platforms for Cancer TherapyEvidence for ADCC in Cancer Therapy; ADCC in Infectious Disease: A Correlate of Protection?; Studies of Herpes Simplex Virus; Studies of Human and Simian Immunodeficiency Virus; Ongoing Debate and a Possible Consensus; Rational Modification of ADCC Activity; Enhancing the Link between ADCC and Adaptive Immunity; Perspectives: Future Directions; Acknowledgments; References; 2 Antibody-Dependent Cellular Phagocytosis and Its Impact on Pathogen Control; Introduction; Phagocytic Cells and Their Fc Receptors Various Receptors for IgGDifferential Expression of Fc Receptors on Phagocytic Cells; Fc Receptor-Mediated Phagocytosis by Phagocytes; Signaling by Activating FcRs; Regulation of FcR Signals; Phagosome

Maturation; Role of FcR-Mediated Phagocytosis for Pathogen Uptake, Cellular Localization, and Pathogen Control; Bacteria; Avoiding Uptake into Phagocytes; Establishing an Intracellular Niche; Evasion Strategy of Bacteria: Proteolytic Degradation of Antibodies; Viruses; Targeting of Viruses to FcRs; Antibody-Dependent Enhancement of Infection; FcR-Mediated Uptake of Parasites and Fungi
Leishmania-Specific Antibodies Can Shift the Balance between Th1 and Th2 ResponsesToxoplasma is Targeted to Lysosomes in the Presence of Specific Antibody; Antibody-Mediated Phagocytosis of Invasive Fungi; Concluding Remarks; References; 3 Interactions Between the Complement System and Fc Receptors; Preliminary Comments; Complement Fragment C3b Mediates Binding of IgG Immune Complexes to Primate Erythrocytes: Immune Adherence; Historical Perspective; Modern Times and Mechanisms: CR1 is Removed from Erythrocytes
Complement Fragment C3d Mediates Binding of Substrates to CR2 on B Cells: Antigen Trafficking and Its Significance in HIV D...Similarities and Differences between CR1 and CR2; The Shuttle Mechanism: CR2 and Antigen Presentation; CR1, CR2, and AIDS; A Clue to a Mechanism: Lessons Learned from Dendritic Cells; Cooperation/Synergy between Fc Receptors and Complement Receptors on Effector Cells; In Vivo Studies of the Clearance of Opsonized Erythrocytes; In Vitro Evidence for Synergy between Fc Receptors and Complement Receptors; Interaction between FcRIII and CR3; C3b-IgG as a Superopsonin Interaction between FcR and Complement: Cancer Models

Sommario/riassunto

Antibody Fc is the first single text to synthesize the literature on the mechanisms underlying the dramatic variability of antibodies to influence the immune response. The book demonstrates the importance of the Fc domain, including protective mechanisms, effector cell types, genetic data, and variability in Fc domain function. This volume is a critical single-source reference for researchers in vaccine discovery, immunologists, microbiologists, oncologists and protein engineers as well as graduate students in immunology and vaccinology. Antibodies represent the correlate of p