

1. Record Nr.	UNINA9910349284103321
Titolo	Fc Mediated Activity of Antibodies : Structural and Functional Diversity / / edited by Jeffrey V. Ravetch, Falk Nimmerjahn
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-31053-1
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (VII, 150 p. 14 illus., 12 illus. in color.)
Collana	Current Topics in Microbiology and Immunology, , 0070-217X ; ; 423
Disciplina	616.079
Soggetti	Immunology Cancer research Infectious diseases Cancer Research Infectious Diseases
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	IgG Fc receptors: evolutionary considerations -- Role of FcγRs in Antibody Based Cancer Therapy -- Anti-inflammatory Activity of IgG-Fc -- IgG Fc glycosylation in human immunity -- IgE Glycosylation in Health and Disease -- Immune Complex Vaccination -- Fc receptors in anti-microbial protection.
Sommario/riassunto	This volume explores several aspects of how antibodies mediate their activity in vivo, ranging from cancer immunotherapy to autoimmunity, infection, and vaccination. Divided into seven chapters, it provides in- depth insights into how antibodies and especially the antibody fragment crystallizable (Fc) domain modulate immune responses and antibody activity. The book begins by discussing evolutionary aspects of how the family of Fc receptors that are the key molecules for antibody activity evolved. In turn, it addresses the molecular and cellular pathways underlying IgG activity in cancer immunotherapy, and focuses on how IgG glycosylation regulates IgG and IgE activity in autoimmunity, allergy and infection. In closing, it presents strategies for developing novel antibody-based vaccination approaches. The book is intended for a very broad readership, including graduate students,

postdocs and principal investigators with a basic grasp of immunology.
