

Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC)

Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner

Download now

Click here if your download doesn"t start automatically

Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC)

Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner

Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner

Antibody-dependent cellular cytotoxicity (ADCC), also called antibody-dependent cell-mediated cytotoxicity, is an immune mechanism through which Fc receptor-bearing effector cells can recognize and kill antibody-coated target cells expressing tumor- or pathogen-derived antigens on their surface. Numerous associations between ADCC activity, Fc receptor polymorphisms, and clinical outcomes have been observed in both the settings of vaccination and monoclonal antibody therapy. Here, the effector cells and receptors involved in ADCC are introduced, followed by a description of the four main stages and mechanisms leading to the antibody-dependent effector-mediated killing of the target cell: (1) Recognition of the target cell and Fc receptor cross-linking on the surface of the effector cell; (2) phosphorylation of immunoreceptor tyrosinebased activation motifs (ITAMs) by cellular src kinases within the effector cell; (3) triggering of three main downstream signaling pathways in the effector cell, resulting in cytotoxic granule polarization and release; and (4) killing of the target cell via the predominant perforin/granzyme cell death pathway. Further, a summary and a discussion are presented in relation to case studies in which in vitro ADCC activity correlates with protection against infectious diseases and outcomes in monoclonal antibody therapy of cancer in vivo. The means by which these mechanisms are currently being exploited by recombinant antibody engineering, and a path toward a future in which designed vaccines take advantage of variant ADCC activity are also discussed. Throughout the chapter, attention is drawn to the fact that, while the majority of ADCC studies have been based on research using peripheral blood mononuclear cells in which NK cells have been assumed to be the main effectors, questions remain unanswered about ADCC mediated by non-NK cell populations in peripheral blood and in mucosal compartments.

▶ Download Antibody Fc: Chapter 1. Antibody-Dependent Cellula ...pdf

Read Online Antibody Fc: Chapter 1. Antibody-Dependent Cellu ...pdf

Download and Read Free Online Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner

From reader reviews:

Cortney Roller:

Do you one among people who can't read gratifying if the sentence chained within the straightway, hold on guys this particular aren't like that. This Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) book is readable by you who hate those straight word style. You will find the data here are arrange for enjoyable examining experience without leaving perhaps decrease the knowledge that want to give to you. The writer connected with Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) content conveys the idea easily to understand by many individuals. The printed and e-book are not different in the content but it just different available as it. So, do you nevertheless thinking Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) is not loveable to be your top record reading book?

Karen Bell:

Reading can called brain hangout, why? Because while you are reading a book specifically book entitled Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) your thoughts will drift away trough every dimension, wandering in every aspect that maybe not known for but surely can be your mind friends. Imaging each word written in a publication then become one type conclusion and explanation which maybe you never get just before. The Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) giving you a different experience more than blown away your head but also giving you useful details for your better life in this era. So now let us demonstrate the relaxing pattern this is your body and mind will probably be pleased when you are finished studying it, like winning a game. Do you want to try this extraordinary spending spare time activity?

Anthony Rouse:

You can obtain this Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) by go to the bookstore or Mall. Simply viewing or reviewing it can to be your solve issue if you get difficulties for your knowledge. Kinds of this book are various. Not only through written or printed and also can you enjoy this book by means of e-book. In the modern era like now, you just looking of your mobile phone and searching what your problem. Right now, choose your personal ways to get more information about your guide. It is most important to arrange you to ultimately make your knowledge are still update. Let's try to choose proper ways for you.

Philip Martin:

Reading a book make you to get more knowledge from the jawhorse. You can take knowledge and information originating from a book. Book is created or printed or highlighted from each source that filled update of news. With this modern era like currently, many ways to get information are available for you actually. From media social such as newspaper, magazines, science book, encyclopedia, reference book, novel and comic. You can add your understanding by that book. Do you want to spend your spare time to

open your book? Or just looking for the Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) when you desired it?

Download and Read Online Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner #I3ZFCEL86BN

Read Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) by Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner for online ebook

Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) by Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) by Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner books to read online.

Online Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) by Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner ebook PDF download

Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) by Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner Doc

Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) by Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner Mobipocket

Antibody Fc: Chapter 1. Antibody-Dependent Cellular Cytotoxicity (ADCC) by Victor Raúl Gómez Román, Joseph C. Murray, Louis M. Weiner EPub