1. Record Nr.   UNINA9910253868003321

   Titolo   Protein Targeting Compounds : Prediction, Selection and Activity of Specific Inhibitors / / edited by Thomas Böldicke

   Pubbl/distr/stampa Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016

   ISBN   3-319-32805-0

   Edizione   [1st ed. 2016.]

   Descrizione fisica 1 online resource (VIII, 288 p. 49 illus., 31 illus. in color.)

   Collana   Advances in Experimental Medicine and Biology, , 0065-2598 ; ; 917

   Disciplina   574.19296

   Soggetti   Immunology

   Lingua di pubblicazione   Inglese

   Formato   Materiale a stampa

   Livello bibliografico   Monografia

   Nota di bibliografia   Includes bibliographical references at the end of each chapters and index.

   Nota di contenuto   Introduction -- Part I Methods of Structure Prediction -- Chapter 1 In Silico Prediction of Target-Inhibitor Interactions -- Part II Antibodies -- Chapter 2 Antibodies and Selection of Monoclonal Antibodies -- Chapter 3 Selection of Recombinant Human Antibodies -- Chapter 4 Selection of Recombinant Human Antibodies against Toxins and Viruses -- Chapter 5 Recent Advances with ER Targeted Intrabodies -- Chapter 6 Therapeutic Blocking Antibodies against Oncogenic Receptors and Growth Factors -- Chapter 7 Synthetic Cystine-Knot Miniproteins-Valuable Scaffolds for Polypeptide Engineering -- Part III Peptides, Small Molecules and Aptamers -- Chapter 8 Peptides and Peptide Analogs to Inhibit Protein -- Chapter 9 Allosteric Modulators of the Class A G Protein coupled Receptors -- Chapter 10 Phosphatases: Their Roles in Cancer and their Chemical Modulators -- Chapter 11 Selection and Application of Aptamers and Intramers -- Part IV Angiogenesis Inhibitors -- Chapter 12 Inhibitors of Angiogenesis.

   Sommario/riassunto This book presents an overview of the most relevant protein knockdown techniques. Readers will find a description of the generation and use of recombinant human antibodies, ER intrabodies and peptides as well as a description of the working mechanism and potential of the inhibitory action of each of these molecules. The book will also describe the selection and activity of a number of phosphatases, aptamers and allosteric modulators, focusing on A G

protein coupled receptors. The book starts with a chapter on the in silico prediction of target-inhibitor interactions. Key aspects of this book are: - Selection strategies for monoclonal and recombinant human antibodies - Selection strategies for ER intrabodies, peptides and aptamers - Examples of the most efficient inhibitors and their applications in protein biochemistry and cell biology - Antibodies for cancer therapy and inhibitors of angiogenesis. The book will be of great interest to scientists and students working in the life sciences on all areas related to protein biology. The variety of methods to modulate the activities of specific proteins which are introduced here will be of great benefit to the reader who is interested in general protein research or to readers who have very specific protein related questions.