Record Nr. UNINA9910784788703321 Phage display [[electronic resource]]: a practical approach // edited **Titolo** by Tim Clackson, Henry B. Lowman Pubbl/distr/stampa Oxford;; New York,: Oxford University Press, c2004 **ISBN** 1-383-05013-9 1-280-84529-5 0-19-151645-7 Descrizione fisica 1 online resource (357 p.) Practical approach series;; no. 266 Collana Altri autori (Persone) ClacksonTim LowmanHenry B Disciplina 579.26 Soggetti Bacteriophages Viral proteins Microbial biotechnology 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 Contents; Protocol list; List of abbreviations; List of contributors; 1 Introduction to phage biology and phage display; 2 Constructing phage display libraries by oligonucleotide-directed mutagenesis; 3 In vitro DNA recombination; 4 Phage selection strategies for improved affinity and specificity of proteins and peptides; 5 Rapid screening of phage displayed protein binding affinities by phage ELISA; 6 Identification of novel ligands for receptors using recombinant peptide libraries; 7 Substrate phage display 8 Protease-based selection of stably folded proteins and protein domains from phage display libraries9 Phage display of zinc fingers and other nucleic acid-binding motifs; 10 In vivo and ex vivo selections using phage-displayed libraries; 11 Screening phage libraries with sera; 12 Interaction cloning using cDNA libraries displayed on phage; 13 Phage antibody libraries: 14 Affinity maturation of phage antibodies: Appendix: Non-standard suppliers; Index; Sommario/riassunto This new book aims to enable researchers to design and undertake all

aspects of a phage display project, from designing an experimental strategy and constructing a library to performing selections and

analyzing the results. All of the protocols and chapters are extensively cross-referenced, allowing readers to move beyond the specific examples provided in order to customize the procedures for their own protein or selection system of interest. Phage Display is an up-to-date, comprehensive and integrated experimental guide to the technique, which is essential reading for anyone currently using,