1. Record Nr. UNINA9910140501703321 Vaccine development and manufacturing / / edited by Emily P. Wen, **Titolo** Ronald Ellis, Narahari S. Pujar; Michel Chartrain [and thirty one others], contributors Hoboken, New Jersey:,: Wiley,, 2015 Pubbl/distr/stampa ©2015 **ISBN** 1-78684-221-1 1-118-87090-5 1-118-87091-3 1-118-87092-1 Descrizione fisica 1 online resource (1044 p.) Collana Wiley Series in Biotechnology and Bioengineering Disciplina 615.3/72 Soggetti Vaccines Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Cover; Series; Title Page; Copyright; Acknowledgments; Preface; Contributors: Chapter 1: History of Vaccine Process Development; 1.1 Introduction; 1.2 Vaccines Bioprocess Evolution; 1.3 Live Attenuated and Inactivated Virus Vaccines; 1.4 Live or Whole-Killed Bacterial Vaccines: 1.5 Classical Subunit Vaccines: 1.6 Recombinant Subunit Vaccines: 1.7 Conjugate Vaccines: 1.8 Downstream Processing: 1.9 Vaccines for the Developing World: Large Volume, Low Cost, and Thermostable: 1.10 Summary: Acknowledgments: References Chapter 2: The Production of Plasmid DNA Vaccine in Escherichia coli: A Novel Bacterial-Based Vaccine Production Platform2.1 Introduction: E. coli in Vaccine Production; 2.2 Brief Overview of DNA Vaccines: Mechanisms and Methods of Vaccinations; 2.3 Current Status of DNA Vaccines; 2.4 Required Physical Properties of Plasmid DNA Vaccines; 2.5 Choice of E. coli Host Strain; 2.6 Factors Influencing Plasmid Stability; 2.7 Transformation, Selection of Producing Clones, and Cell Banking; 2.8 Production Process; 2.9 Requirements for Clinical

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Sommario/riassunto

Vaccine Manufacturing and Production is an invaluable reference on how to produce a vaccine - from beginning to end - addressing all classes of vaccines from a processing, production, and regulatory viewpoint. It will provide comprehensive information on the various fields involved in the production of vaccines, from fermentation, purification, formulation, to regulatory filing and facility designs. In recent years, there have been tremendous advances in all aspects of vaccine manufacturing. Improved technology and growth media have been developed for the production of cell culture with high