Record Nr. UNINA9910298288403321 **Titolo** Vaccine Analysis: Strategies, Principles, and Control [[electronic resource] /] / edited by Brian K. Nunnally, Vincent E. Turula, Robert D. Sitrin Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-662-45024-0 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (669 p.) Disciplina 610 612015 615372 616079 Soggetti Vaccines **Immunology** Medical biochemistry Vaccine Medical Biochemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Live Attenuated Viral Vaccines -- Inactivated Viral Vaccines --Recombinant Virus Like Particle Protein Vaccines -- Analysis of influenza vaccines -- Live-attenuated and inactivated whole-cell bacterial vaccines -- Analytical control strategy of bacterial subunit vaccines -- Bacterial Polysaccharide Vaccines: Analytical Perspectives -- Glycoconjugate vaccines -- Vaccines in research and development: new production platforms and new biomolecular entities for new needs -- Role of Analytics In Viral Safety -- Deep Sequencing Applications for Vaccine Development and Safety -- Quality-by-design: As related to analytical concepts, control and qualification -- Vaccine Potency Assays -- Establishing a Shelf-life and Setting Lot-release Specifications --Vaccine Reference Standards -- Lot Release of Vaccines by Regulatory Authorities and Harmonization of Testing Requirements -- Dendritic cell targeting vaccines.

Sommario/riassunto

This book is an indispensable tool for anyone involved in the research, development, or manufacture of new or existing vaccines. It describes a wide array of analytical and quality control technologies for the diverse vaccine modalities. Topics covered include the application of both classical and modern bio-analytical tools; procedures to assure safety and control of cross contamination; consistent biological transition of vaccines from the research laboratory to manufacturing scale; whole infectious attenuated organisms, such as live-attenuated and inactivated whole-cell bacterial vaccines and antiviral vaccines using attenuated or inactivated viruses; principles of viral inactivation and the application of these principles to vaccine development; recombinant DNA approaches to produce modern prophylactic vaccines; bacterial subunit, polysaccharide and glycoconjugate vaccines; combination vaccines that contain multiple antigens as well as regulatory requirements and the hurdles of licensure.