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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Tumor-Associated Antigens : Identification, Characterization, and Clinical Applications; Contents; List of Contributors; Part One Tumor- associated Antigens (TAAs): Subclasses of TAAs; 1 T Cell Antigens in Cancer; 1.1 Introduction; 1.2 Generation of T-cell Epitopes; 1.2.1 Subclasses of Tumor-associated T-cell Antigens; 1.2.1.1 Unique Tumor Antigens; 1.2.1.2 Cancer Testis Antigens; 1.2.1.3 Differentiation Antigens; 1.2.1.4 Overexpressed Antigens; 1.3 Identification of T-cell Antigens and their Epitopes; 1.3.1 T-cell Antigens for Cancer Immunotherapy - How are Candidates Selected? 1.4 ConclusionsReferences; 2 Human Tumor Antigens as Targets of Immunosurveillance and Candidates for Cancer Vaccines; 2.1 Introduction; 2.2 Tumor Antigen Classes; 2.2.1 Oncofetal Antigens; 2.2.2 Oncogenes as Tumor Antigens; 2.2.3 Overexpressed Normal Molecules as Tumor Antigens; 2.2.4 Cancer-Testis (CT) Antigens; 2.2.5 Minor Histocompatibility Antigens (mHAgs) as Tumor Antigens; 2.2.6 Human Melanoma Antigens; 2.2.7 Human Glioma Antigens and Immunosurveillance in the CNS; 2.2.8 Heat Shock Proteins, Efficient

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	Carriers of Tumor Antigens 2.2.9 Dendritic Cells, Efficient Cross-presenters of Tumor Antigens2. 2.10 Spontaneous and Vaccine-induced Immunity and the Tumor Microenvironment; 2.3 Summary; References; Part Two Methods to Detect TAAs; 3 Humoral Immune Responses against Cancer Antigens: Serological Identification Methods. Part I: SEREX; 3.1 Introduction; 3.2 The SEREX Approach; 3.2.1 Identification of Human Tumor Antigens by SEREX; 3.2.2 Specificity of Human Tumor Antigens; 3.2.2.1 Shared Tumor Antigens; 3.2.2.2 Differentiation Antigens; 3.2.2.3 Antigens Encoded by Mutated Genes; 3.2.2.4 Viral Genes 3.2.2.5 Overexpressed Genes3.2.2.6 Amplified Genes; 3.2.2.7 Splice Variants of Known Genes; 3.2.2.8 Cancer-related Autoantigens; 3.2.2.9 Non-cancer-related Autoantigens; 3.2.2.10 Products of Underexpressed Genes; 3.2.3 Significance of Antibodies against SEREX Antigens; 3.2.4 Reverse T Cell Immunology; 3.2.5 Functional Significance of Human Tumor Antigens; 3.2.6 The Human Cancer Immunome; 3.2.7 Perspectives for Vaccine Development; 3.3 Conclusions; References; 4 Humoral Immune Responses against Cancer Antigens: Serological Identification Methods. Part II: Proteomex and AMIDA; 4.1 Introduction 4.1.1 A Humoral Response against Self-antigens: The Notion of Tumor- associated Antigens4.2 Implementation of Serum Antibodies: Serological Screening Technologies; 4.2.1 PROTEOMEX, alias SERPA and SPEARS; 4.2.1.1 PROTEOMEX Technology and its 'Pros' and 'Cons'; 4.2.1.2 Candidate Biomarkers Identified by PROTEOMEX, 4.2.1.3 Implementation of Candidate Biomarkers in the Clinical Application; 4.2.2.1 Autologous AMIDA; 4.2.2.2 Allo-AMIDA; 4.2.3 Advantages and Disadvantages of AMIDA; 4.3 AMIDA Antigens and Clinical Application; 4.3.1 Diagnostic TAAs Detected with AMIDA Screening 4.3.2 Therapeutic Markers
Sommario/riassunto	The first comprehensive and most recent overview of the topic, this ready reference and handbook reviews current knowledge of TAAs, their subclasses, and pinpoints their application areas in medicine. In addition, it emphasizes target identification procedures, the need for an accurate and thorough analysis of the function of TAAs, and the validation of those in clinical settings. The whole is rounded off with an overview of currently approved therapeutic antibodies. The result is a must-have for biologists and oncologists in science, clinics and industry.