1. Record Nr. UNINA9910136458303321 Micro- and nanosystems for biotechnology / / edited by J. Christopher **Titolo** Pubbl/distr/stampa Weinheim, Germany:,: Wiley-VCH Verlag GmBH & Company KGaA,, [2016] ©2016 **ISBN** 3-527-80132-4 3-527-80129-4 Descrizione fisica 1 online resource (305 p.) Advanced biotechnology;; volume 2 Collana Soggetti Biotechnology Nanotechnology Microtechnology 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 and index. Nota di contenuto Cover; Title Page; Copyright; Contents; List of Contributors; About the Series Editors; Preface; Part I Microsystems for Single-Cell Analysis; Chapter 1 Types of Clinical Samples and Cellular Enrichment Strategies: 1.1 Introduction; 1.2 Types of Clinical Samples; 1.2.1 Solid Clinical Samples; 1.2.1.1 Cellular Subtypes Found in Solid Clinical Samples; 1.2.2 Liquid Clinical Samples and Cellular Subtypes: 1.2.2.1 Blood: 1.2.2.2 Bone Marrow; 1.2.2.3 Placental or Umbilical Cord Blood; 1.2.2.4 Urine; 1.2.2.5 Cerebrospinal Fluid (CSF); 1.2.2.6 Saliva 1.3 Sample Processing and Conventional Methods of Cell Enrichment1. 3.1 Processing Solid Clinical Samples; 1.3.1.1 Processing Liquid Samples; 1.3.2 Cell Enrichment; 1.3.2.1 Laser Capture Microdissection (LCM): 1.3.2.2 Density Gradient Centrifugation: 1.3.2.3 Fluorescence-Activated Cell Sorting (FACS); 1.3.2.4 Magnetic Activated Cell Sorting (MACS); 1.3.2.5 CellSearchTM; 1.4 Microscale/Nanoscale Devices for Cellular Enrichment; 1.4.1 Filtration Approaches; 1.4.2 Hydrodynamic Mechanisms; 1.4.3 Surface Treatments; 1.4.4 Magnetophoresis; 1.4.5 Electrophoresis; 1.4.6 Acoustophoresis

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