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Collana	Techniques in Life Science and Biomedicine for the Non-Expert, , 2367-1122
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Soggetti	Cytology - Technique Microbiology - Technique Biotechnology Cytology Biology - Technique Experimental immunology Cytological Techniques Microbiology Techniques Cell Biology Immunological Techniques
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	1. Overview to animal cell culture -- 2. Cell culture laboratory -- 3. Good lab practices and bio-safety measures -- 4. Managing sterility in the lab -- 5. Media and buffer preparation for cell culture -- 6. Properties of cultured cells and selection of culture media -- 7. Selection and maintenance of cultured cells -- 8. Inoculation and passaging of adherent cells -- 9. Counting of cells -- 10. Cryopreservation of cell lines -- 11. Resuscitation of frozen cell line -- 12. Isolation and culturing of cells from different tissues -- 13. Differentiation, transformation and immortalization of cells -- 14. Co-culture techniques -- 15. 3d cell culture techniques -- 16. Stem cell culture techniques -- 17. Identification and removal of biological

contamination in the media and cell suspensions -- 18. Analysis of cell growth kinetics in suspension and adherent types cell line -- 19. Applications of animal cell culture based assays -- 20. Ethical issues in animal cell culture -- 21. Common troubleshooting methods in cell culture techniques.

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#### Sommario/riassunto

This introductory guide provides novice researchers and lab students with a thorough step-by-step approach to standard animal cell culture techniques. Coverage includes lab safety and best practices, sterility management, preparation, ethical considerations, and troubleshooting for common pain points. This is an up-to-date, indispensable handbook for early-career researchers and students, as well as established scientists in biotechnology, cell and developmental biology, pharmaceutical toxicology, cytogenetics, and more. .

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