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| Titolo                  | Human embryonic stem cells [[electronic resource] ] : the practical handbook / / editors, Stephen Sullivan, Chad A. Cowan and Kevin Eggan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| Altri autori (Persone)  | SullivanStephen, Dr.<br>CowanChad A<br>EgganKevin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| Nota di contenuto       | Organization and good aseptic technique in the human embryonic stem cell laboratory / Minal J. Patel, Emma L. Stephenson and Stephen L. Minger -- Sourcing human embryonic stem cell lines / Glyn Stacey -- Culture of human embryos for stem cell derivation / R. Douglas Powers and Jeannine Witmyer -- Derivation of human embryonic stem cell lines / Stephen Sullivan ... [et al.] -- Standard culture of human embryonic stem cells / Jeremy M. Crook, Rachel Horne and Alan Colman -- Chemically-defined culture of human embryonic stem cells / Julie Hsu Clark and Sheng Ding -- Phenotypic analysis of human embryonic stem cells / Jonathan S. Draper, Cheryle A. Seguin and Peter W. Andrews -- Genetic and epigenetic analysis of human embryonic stem cells / Laurie A. Boyer, Rudolf Jaenisch and Maisam Mitalipova -- In vivo characterization of human embryonic stem cells / Scott A. Noggle, |

Francesca M. Spagnoli and Ali H. Brivanlou -- In vitro differentiation of human embryonic stem cells / A. Henry Sathananthan and Alan Trounson -- Differentiation of human embryonic stem cells into extraembryonic cell types / Cheryle A. Seguin and Jonathan S. Draper -- Directed differentiation of human embryonic stem cells into endoderm / Kenji Osafune ... [et al.] -- Directed differentiation of human embryonic stem cells into mesoderm / Christine Mummery ... [et al.] -- Directed differentiation of human embryonic stem cells into ectoderm / Emily A. Davis ... [et al.] -- Gene targeting in human embryonic stem cells : knock out and knock in by homologous recombination / Thomas P. Zwaka -- RNA interference in human embryonic stem cells / M. William Lensch, Asmin Tulpule and Holm Zaehres -- Generation of human gene reporters using bacterial artificial chromosome recombineering / Andrew J. Washkowitz and David A. Shaywitz.

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#### Sommario/riassunto

With this valuable practical guide, three members of the Harvard Stem Cell Institute have compiled and edited the definite handbook for the exciting new field of human embryonic stem cell research. The editors have gathered protocols from scientists with extensive reputation and expertise, describing and comparing currently used techniques for the culture of human stem cells and discussing the strengths and weaknesses of the different approaches. Human Embryonic Stem Cells: The Practical Handbook contains the first centralised collection of methods used in human embryonic stem cell bi

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