

1. Record Nr.	UNINA9910830621203321
Titolo	Oligonucleotides as therapeutic agents [[electronic resource] /] / [editors, Derek J. Chadwick (Organizer) and Gail Cardew]
Pubbl/distr/stampa	Chichester ; ; New York, : Wiley, 1997
ISBN	1-282-34805-1 9786612348051 0-470-51539-2 0-470-51540-6
Descrizione fisica	1 online resource (262 p.)
Collana	Ciba Foundation symposium ; ; 209
Altri autori (Persone)	ChadwickDerek CardewGail
Disciplina	615 615.31
Soggetti	Oligonucleotides - Therapeutic use Antisense nucleic acids - Therapeutic use
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Proceedings of the Symposium on Oligonucleotides as Therapeutic Agents, held at Ciba Foundation on 7-9 January 1997.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	OLIGONUCLEOTIDES AS THERAPEUTIC AGENTS; Contents; Participants; Introduction; Oligonucleotide analogues: an overview; Phosphorothioate oligodeoxynucleotides: large-scale synthesis and analysis, impurity characterization, and the effects of phosphorus stereochemistry; Discovering antisense reagents by hybridization of RNA to oligonucleotide arrays; Pharmacokinetics of oligonucleotides in cell culture; Pharmacokinetics of oligonucleotides; Controversies in the cellular pharmacology of oligodeoxynucleotides; Sequence-specific control of gene expression by antigenic and clamp oligonucleotides First- and second-generation antisense oligonucleotide inhibitors targeted against human c-ras kinase Differential oligonucleotide activity in cell culture versus mouse models; Structure-activity relationships in cell culture; Progress in antisense therapeutics discovery and development; Oligonucleotide therapeutics for human leukemia; Therapeutic applications of catalytic antisense RNAs (ribozymes); Exogenous application of ribozymes for inhibiting gene expression;

Efficient process technologies for the preparation of oligonucleotides
In vivo production of oligodeoxyribonucleotides of specific sequences:
application to antisense DNA
Summary; Index of contributors; Subject
index

Sommario/riassunto

The use of oligonucleotides as therapeutic agents rests upon their ability to interfere, in a sequence-specific manner, with the fundamental machinery of protein synthesis either by binding to the mRNAs transcribed from a gene or by binding directly to a target gene. This approach can be used not only for inhibition of the synthesis of host proteins but also of those required by invading pathogens. Potential therapeutic applications are enormous, ranging over hypertension, cardiovascular disease, autoimmune disease, viral and other parasitic infections (especially HIV), and cancer. This book d
