1. Record Nr.	UNINA9910807054603321
Titolo	RNA and DNA editing : molecular mechanisms and their integration into biological systems / / edited by Harold C. Smith
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Interscience, c2008
ISBN	1-281-23753-1 9786611237530 0-470-26226-5 0-470-26225-7
Edizione	[1st ed.]
Descrizione fisica	1 online resource (464 p.)
Altri autori (Persone)	SmithHarold C
Disciplina	572.8/8
Soggetti	RNA editing DNA Nucleotide sequence Genetic transcription
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	RNA AND DNA EDITING; CONTENTS; PREFACE; ACKNOWLEDGMENTS; CONTRIBUTORS; PART I DIVERSIFICATION OF THE PROTEOME THROUGH RNA AND DNA EDITING; CHAPTER 1 DIVERSIFYING EXON CODE THROUGH A-TO-I RNA EDITING; 1.1 Introduction and Background; 1.1.1 Initial Discovery and Context of A-to-I RNA Editing and ADARs; 1.1.2 Important Cases of Recoding by A-to-I Modification in Pre-mRNA; 1.1.3 Cis-Acting Features for A-to-I Editing; 1.1.4 Properties of the A-to-I Editing Machinery; 1.2 Main Questions in the Field and Approaches; 1.2.1 Biochemical Versus Computational Approaches; 1.2.2 Editing of miRNA Sequences 1.3 Future Directions: Evolution of Editing Sites and MachineryReferences; CHAPTER 2 ANTIBODY GENE DIVERSIFICATION BY AID-CATALYZED DNA EDITING; 2.1 Introduction; 2.2 Before AID; 2.2.1 Without DNA (Darkness) and with DNA (Light); 2.2.2 Prominent Early Models for Antibody Diversification; 2.2.3 How Protein Sequencing Technology Enabled an Understanding of Antibody Diversity; 2.2.4 Somatic DNA Rearrangements Underpin V(D)J Joining and Create the

| Sommario/riassunto | RNA and DNA Editing assembles a team of leading experts who present the latest discoveries in the field alongside the latest models and methodology. In addition, the authors set forth the many open questions and suggest routes for further investigation. Overall, the book serves as a practical guide for professionals in the field who need to understand the interrelationship of RNA and DNA editing with other chemical and biological processes. |