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Nota di contenuto	Intro -- THE RIBONUCLEOTIDEREDUCTASE FAMILY:GENETICS AND GENOMICS -- Contents -- Preface -- Introduction -- RNR Classification and Occurrence -- Class I RNRs -- Class II RNRs -- Class III RNRs -- RNR distribution as seen in RNRdb -Ribonucleotide Reductase Database -- Atypical and Unconventional RNRs -- RNR Diversification -- Modularity Hypothesis for RNR ClassDiversificatio -- Regulation of RNRs -- Archaea -- Eubacteria -- Mutational Studies in RNRs -- RNR as an Antiproliferative Targetfor Disease Control -- Substrate Analogues -- Radical Scavengers Attacking the TyrosylRadical -- Iron Chelators -- Peptidomimetics Corresponding to the CTerminusof NrdB -- Manipulating the Expression of RNR -- Other Potential Inhibitors and AllostericNucleotide Analogues -- Future Antiproliferative Regimes -- Acknowledgments -- References -- Index.
Sommario/riassunto	Ribonucleotide reductase (RNR), has a central role in DNA replication and repair by catalysing production of deoxyribonucleotides from the corresponding ribonucleotides. The authors describe a comprehensive summary of how the expression of RNR genes is regulated in several eubacterial organisms and in yeast. Due to RNR's importance for the realisation of DNA replication, it has been recognised as a possible

target for antiproliferative therapy. The authors present a comprehensive summary of RNR-specific inhibitors that have reached clinical trials and/or are currently used in clinical therapy.