

RNA and the Regulation of Gene Expression

A hidden layer of complexity

The role of RNA in regulating gene expression has become a topic of intense interest. In this book internationally recognized experts in RNA research explore and discuss the methods whereby RNA can regulate gene expression with examples in yeast, *Drosophila*, mammals and viral infection, and highlight the application of this

knowledge in therapeutics and research. Topics include gene silencing and gene activation, the hammerhead ribozyme, epigenetic regulation, RNAi, microRNA and pyknons. This comprehensive publication is intended for readers with teaching or research interests in RNA, the regulation of gene expression, genetics, genomics or molecular biology.



Cover illustration: A model depicting the small antisense RNA targeting of a transcriptional silencing complex (HDAC-1, DNMT3a and Ago-1) to an actively transcribing (RNA polymerase II) gene promoter.

(Computer graphics provided by Paula J. Morris, seansite.com)

ISBN 978-1-904455-25-7



CHR=19_STRAND=REVERSE

3T-(16)-GGCTCATTGCAACCTC-(1)-GCCTCCCGGCTTCAAG-(5)-CTGCTGCCTCAGCCTC-(2)-GAGTAGCTC
3T-(16)-GGCTCATTGCAACCTC-(1)-GAGGTGGCAGTGGCC-(18)-CAACAAGAGCAAAACT-(82)-AAGAGATC
5A-(15)-ATCAGTGGAGGTCAGGAGT-(2)-AGACCAGCCTGGCCAA-(36)-TTAGCTGGGTGTTGTTG-(8)-CTC
GGC-(6)-TGCAGTGAAGCTGAGAT-(8)-GCACTCCAGCTGAGG-(38)-TAGCTGGGCTGGTGG-(8)-TATAGT
-(8)-TATAGTCCAGCCTGC-(6)-GCAAGACCTGTCTTT-(4)-AAAAAAATCTAGGC-(2)-GGCAGCTGG
T-(2)-AGACCAGCTGACCAA-(13)-TC
30C-(6)-TGCAGTGGCTGAGAT-(8)-T

CHR=2_STRAND=FORWARD

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