Contents

-	facetributors	1 X:
1	Cloning and Identification of Recombinant Argonaute-Bound Small RNAs Using Next-Generation Sequencing	1
2	Quantification of miRNAs Co-Immunoprecipitated with Argonaute Proteins Using SYBR Green-Based qRT-PCR	2 9
3	Gateway to Understanding Argonaute Loading of Single-Stranded RNAs: Preparation of Deep Sequencing Libraries with In Vitro Loading Samples Eling Goh and Katsutomo Okamura	41
4	Dumbbell-PCR for Discriminative Quantification of a Small RNA Variant Megumi Shigematsu, Shozo Honda, and Yohei Kirino	65
5	MicroRNA Detection by Whole-Mount In Situ Hybridization in C. elegans	<i>7</i> 5
6	cCLIP-Seq: Retrieval of Chimeric Reads from HITS-CLIP (CLIP-Seq) Libraries	87
7	Kinetic Analysis of Small Silencing RNA Production by Human and <i>Drosophila</i> Dicer Enzymes In Vitro	101
8	Nucleic Acid-Binding Assay of Argonaute Protein Using Fluorescence Polarization Tomohiro Miyoshi	123
9	Reconstitution of RNA Interference Machinery	131
0	Single-Molecule Analysis for RISC Assembly and Target Cleavage	145
11	Profiling Open Chromatin Structure in the Ovarian Somatic Cells Using ATAC-seq	165
12	Assessing miR-451 Activity and Its Role in Erythropoiesis	179
13	Functional Analysis of MicroRNAs in Neurogenesis During Mouse Cortical Development	191

x Contents

14	Cellular Approaches in Investigating Argonaute2-Dependent RNA Silencing	205
15	Genomic Tagging of AGO1 Using CRISPR/Cas9-Mediated Homologous Recombination	217
16	Accurate Profiling and Quantification of tRNA Fragments from RNA-Seq Data: A Vade Mecum for MINTmap	237
Ind	lex	257