

## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: miRNA quantification

File Name: Supplementary Data 2

Description: AGO1 HITSCLIP IDR-selected peaks

File Name: Supplementary Data 3

Description: AGO1 PARCLIP IDR-selected peaks

File Name: Supplementary Data 4

Description: Xtail results [ dsRNA AGO1-low / dsRNA GFP]

File Name: Supplementary Data 5

Description: PARalyzer-Cluster on AGO1 PARCLIP R1 sample

File Name: Supplementary Data 6

Description: PARalyzer-Cluster on AGO1 PARCLIP R2 sample

File Name: Supplementary Data 7

Description: PARalyzer-Cluster on pooled AGO1 PARCLIP samples

File Name: Supplementary Data 8

Description: Comprehensive miRNA binding site set (3'UTR, top59 miRNA, on pooled AGO1 PAR-CLIP samples)

File Name: Supplementary Data 9

Description: Reproducible miRNA binding sites on separate AGO1 PAR-CLIP replicate samples (3'UTR, top59 miRNA)

File Name: Supplementary Data 10

Description: High confidence miRNA binding site set. Reproducible miRNA binding sites on separate AGO1 PAR-CLIP replicate samples (3'UTR, top30 miRNA)

File Name: Supplementary Data 11

Description: Reproducible miRNA nucleation bulge binding sites on separate AGO1 PAR-CLIP replicate samples (3'UTR, top30 miRNA)

File Name: Supplementary Data 12

Description: Reproducible miRNA binding sites on separate AGO1 PAR-CLIP replicate samples (coding regions, top30 miRNA)

File Name: Supplementary Data 13

Description: Reproducible miRNA binding sites on separate AGO1 PAR-CLIP replicate samples (5'UTR, top30 miRNA)

File Name: Supplementary Data 14

Description: Gene ontology enrichments

File Name: Supplementary Data 15

Description: Oligonucleotides and SQRC-ERDN spike-in information

File Name: Supplementary Data 16

Description: Process Data set statistics