

**Supplementary Figure S2.** FMRP is unable to exchange strands of perfectly paired siRNA duplexes to target RNAs in vitro. 32P-labeled Dicer (left) or CLP (right) siRNA duplex was incubated with a specific or nonspecific RNA target in the absence or presence of FMRP, or BSA at 4:1 (protein:RNA) molar ratio. b ss siRNA was used instead of siRNA duplex. Control hybridization with a single 32P-labeled strand was conducted at 65°C (3rd lane of each panel).