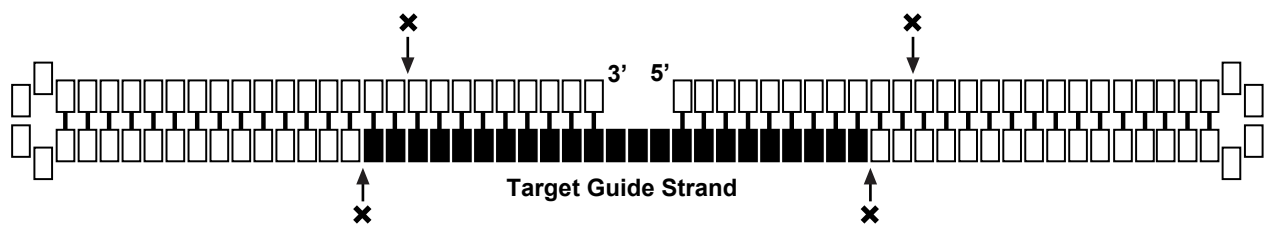


# Asymmetric siRNA (A-siRNA): Direct-to-RISC

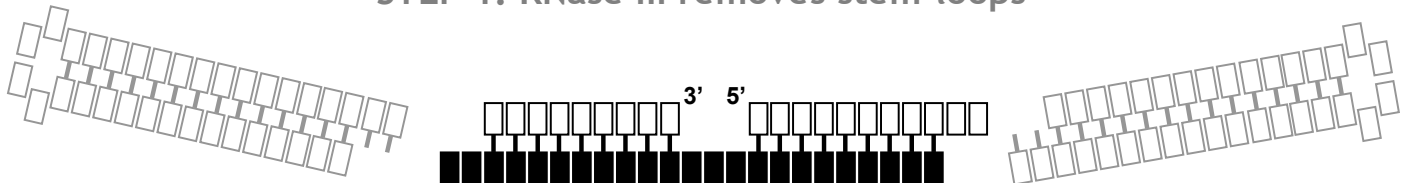
**LIFECYCLE:** Rapid pre-cursor processing by RNase III via tetraloop and single dsRBD for 11/13 or 14/16 stem removal on both 5' & 3' ends.

**MECHANISM:** Loads in RISC complex via 3' overhang for Ago. The duplex guides RISC to the target asymmetrically and eliminates sense strand off-target.

## Native A-siRNA Pre-cursor:



## STEP 1: RNase III removes stem-loops



## Final Asymmetric siRNA:

