Cryo-EM projects of the MALAT1 RNA triple helix

Figures/Preliminary Results

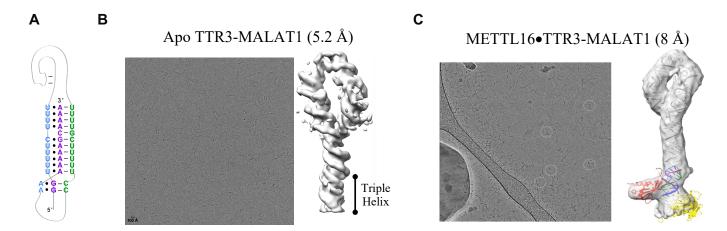


Figure 1. (**A**) A cartoon schematic depicts the MALAT1 RNA triple helix with the TTR3 lasso-like structure appended to the upper stem. The three strands of the triple helix are in three different colors: Watson-Crick strands are purple and green whereas the third strand (or Hoogsteen strand) is blue. (**B**) A representative micrograph image (left) and 3D cryo-EM map (right) are shown for apo TTR3-MALAT1. The triple helix region is at the base. (**C**) A representative micrograph image (left) and 3D cryo-EM map (right) are shown for METTL16 interacting with TTR3-MALAT1. The small light gray circles identify single particles. Using published 3D structures, the map was fit with a model: N-terminal methyltransferase domain of METTL16 (PDB ID: 6B91) in yellow, C-terminal vertebrate conserved regions of METTL16 (PDB ID: 6M1U) in red, triple helix (PDB ID: 4PLX) in blue, purple and green, and TTR3 (PDB ID: 6WLK) is the gray lasso.