

Figure 1: Example micrograph and 2D classification examples from a Dicer-2•R2D2 dataset collected with NCCAT. Dicer-2 is “L” shaped and an extra density is observed off the helicase domain of Dicer-2, which is attributed to R2D2. Bars represent 50Å.

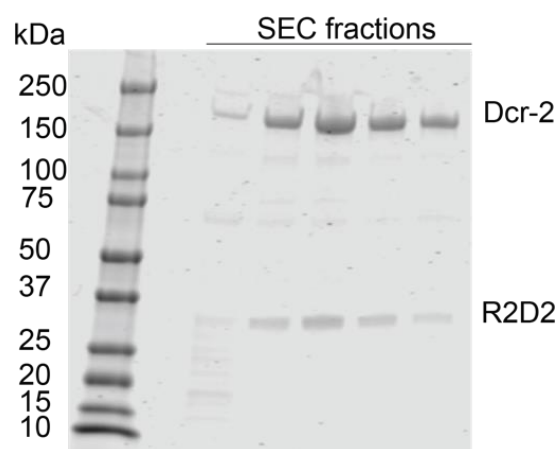


Figure 2: Coomassie stained SDS-PAGE gel for size exclusion chromatography (SEC) fractions after purifying the Dicer-2•R2D2 complex. The fractions with Dicer-2 and R2D2 are pure and the bands are of the correct size. Dicer-2 is 197kDa and R2D2 is 35kDa.

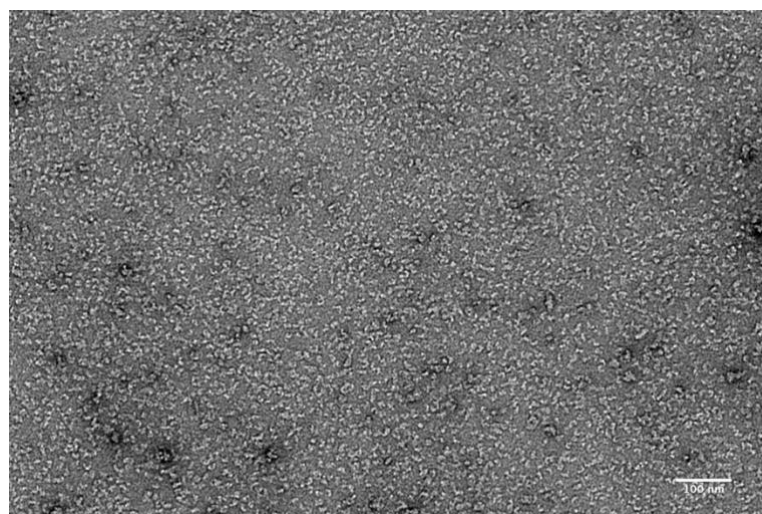


Figure 3: Negative stain image of the Dicer-2•R2D2 complex in the presence of siRNA. The particles are monodispersed and are the correct size, Dicer-2 is approximately 150Å in length.

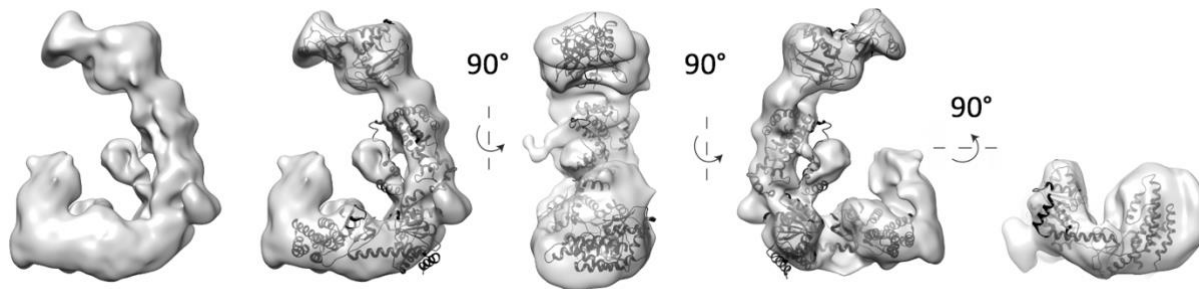


Figure 4: 7.6Å 3D reconstruction of the Dicer-2•R2D2 complex. Reconstruction fit with apo-Dicer-2 (6BUA, dark grey, Sinha et al. 2018). An extra density is observed on the Dicer-2 helicase domain. Since this sample was highly pure, this extra density is likely R2D2, but with the current resolution it is difficult to accurately model this extra density.

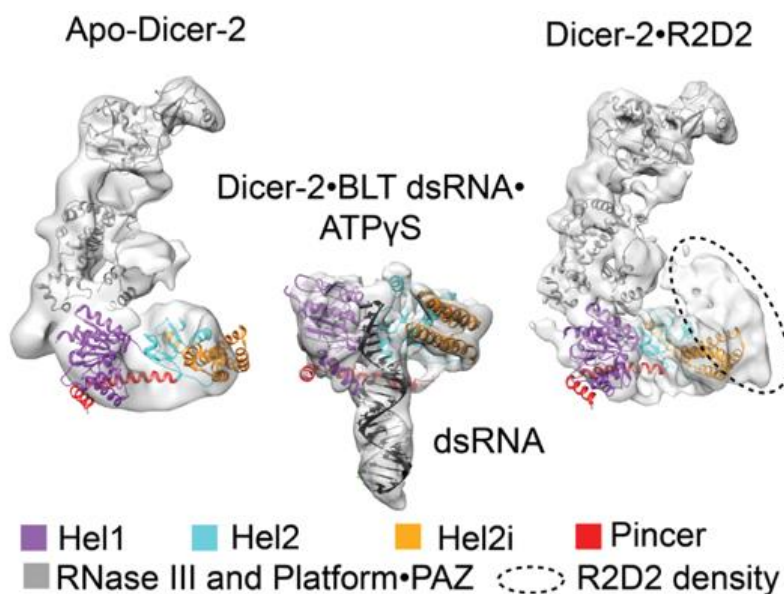


Figure 5: Current cryo-EM structures of Dicer-2 (Apo-Dicer-2, 6BUA; Dicer-2•BLT dsRNA•ATPyS, 6BU9). Colored regions denote subdomains of the Dicer-2 helicase domain as indicated. The dotted circle on the Dicer-2•R2D2 structure denotes the R2D2 density; R2D2 is not modeled.