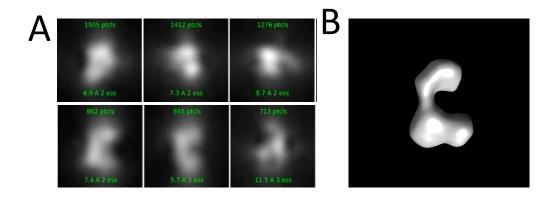


**Figure 1**. 7 Å data of dmDcr-2 (adapted from Sinha et al., *Science* 2018). (A) Reference free 2D classes from particles collected using a TF20/K2. (B) Fitting of known dmDcr-2 domains based on the 7 Å reconstruction.



**Figure 2.** Pre-screening data collected on NYSBC TF20/DE20. (A) 2D classes from a few thousand particle images. (B) Ab initio 3D reconstruction reveals features that are consistent with the "L" shaped Dicer particle.