Project JP211001; Update with Datasets from NCCAT (Mar-Aug 2022)

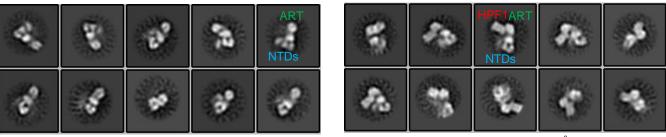


Fig. 1. NS-EM of 5 μ M PARP1-DNA (left) and 2.5 μ M PARP1-DNA-HPF1 (right) in 264 Å boxes with 180 Å masks. The N-terminal domains (NTDs) and the ART fold are identified. HPF1 binds the ART fold.

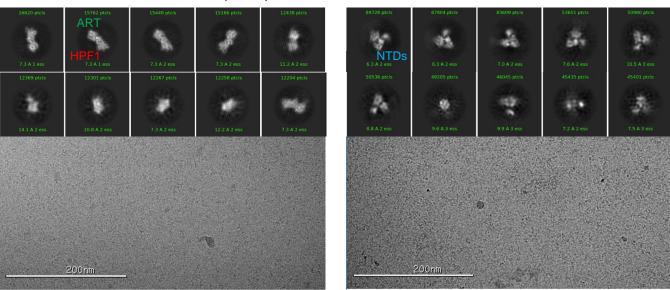


Fig. 2. Left: Chameleon-prepared PARP1-DNA-HPF1 at 10 μ M (245 Å box size, 140 Å mask) frozen with 100-140 ms plunge times. The fragment is ART-HPF1, the NTDs remain unobserved. Right: Graphene-coated grids of PARP1-DNA at 2.5 μ M (256 Å box size, 160 Å mask). The NTDs are visible but the ART fold is relatively mobile. Most high-resolution classes are of one predominant orientation.

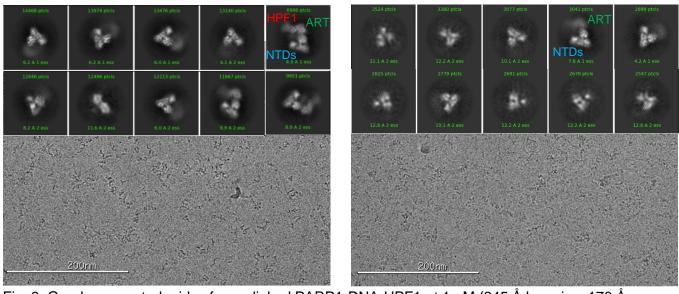


Fig. 3. Graphene-coated grids of crosslinked PARP1-DNA-HPF1 at 1 μ M (245 Å box size, 170 Å mask) imaged untilted (left) and tilted 30° (right). Most classes show the NTDs with a mobile ART-HPF1 fragment, but some in the untilted classes are of the complete complex. Most high-resolution classes are of one predominant orientation. The tilted classes show less secondary structure features and contain fewer particles per micrograph.