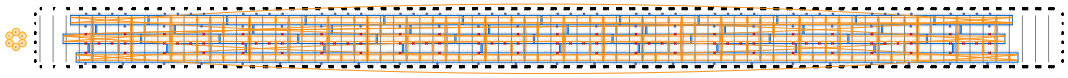


Figure S1a

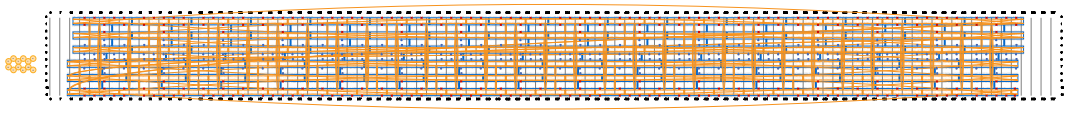
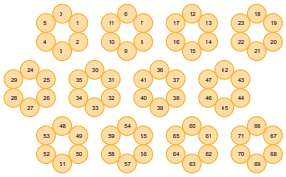
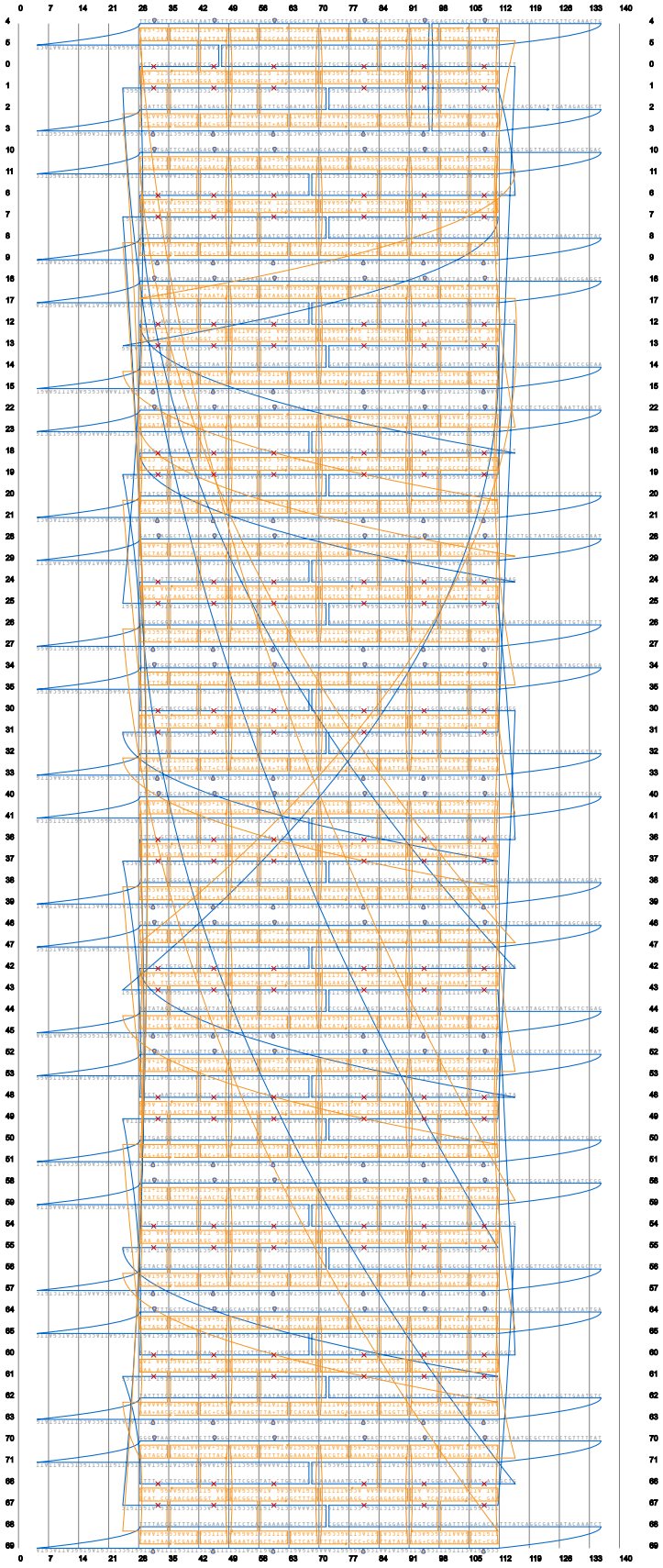


Figure S1b





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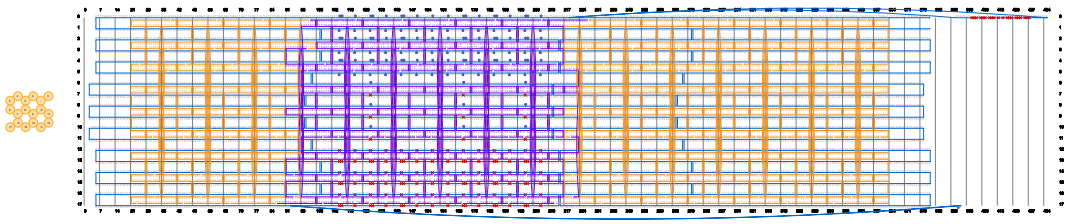

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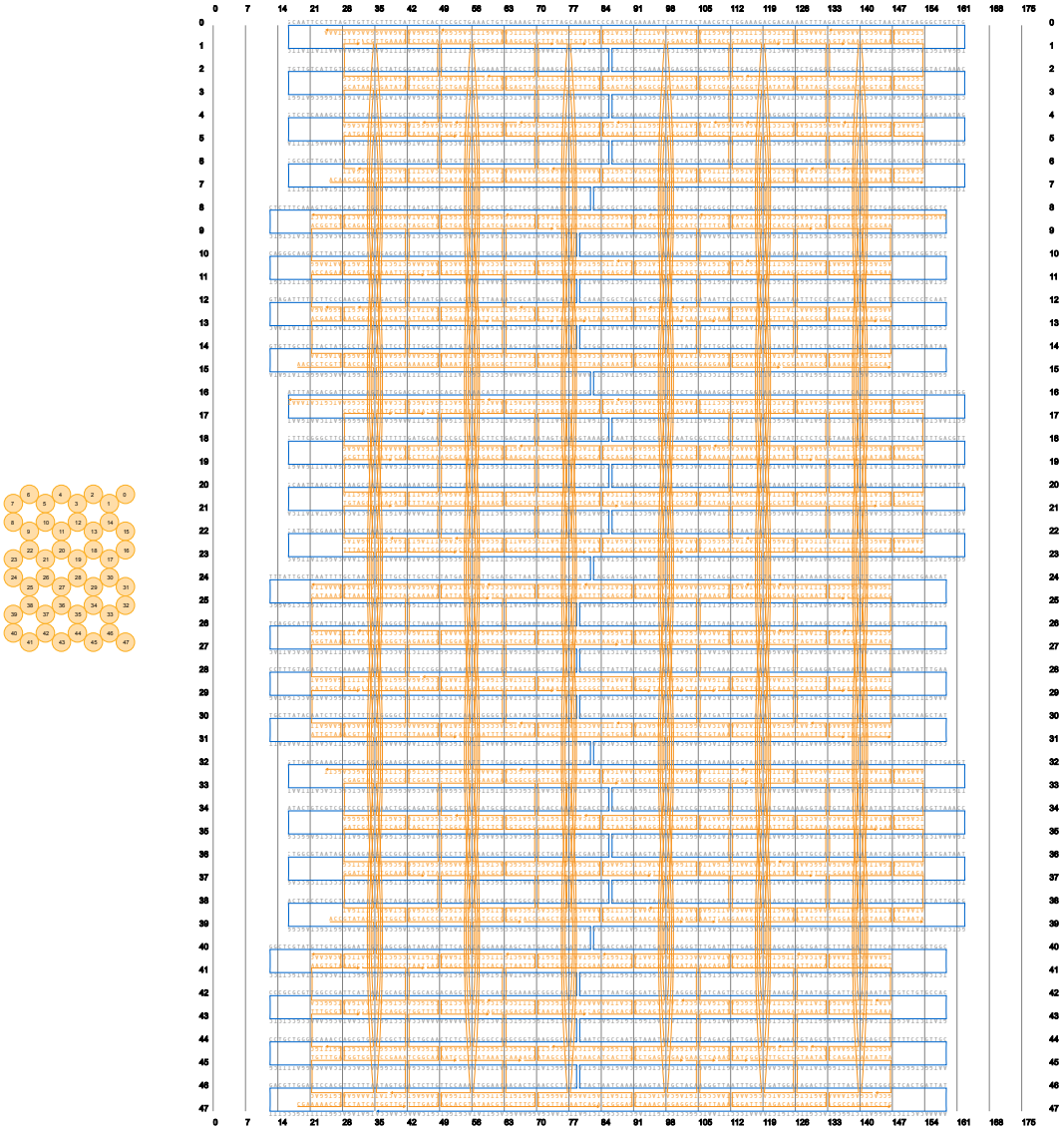
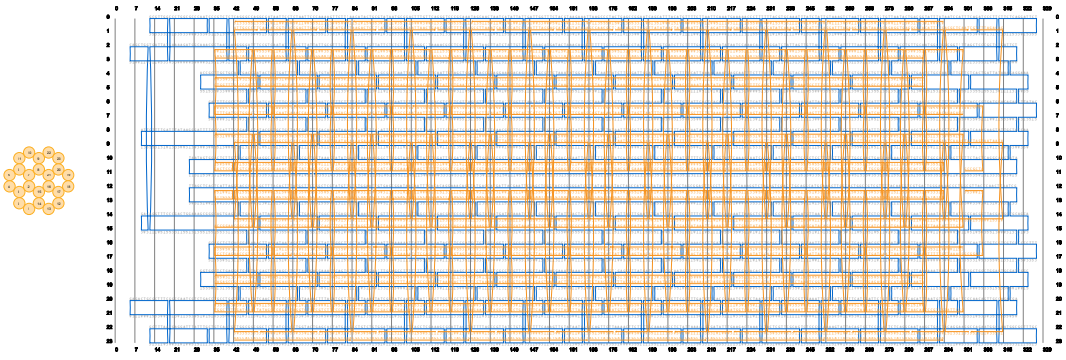


Figure S1e



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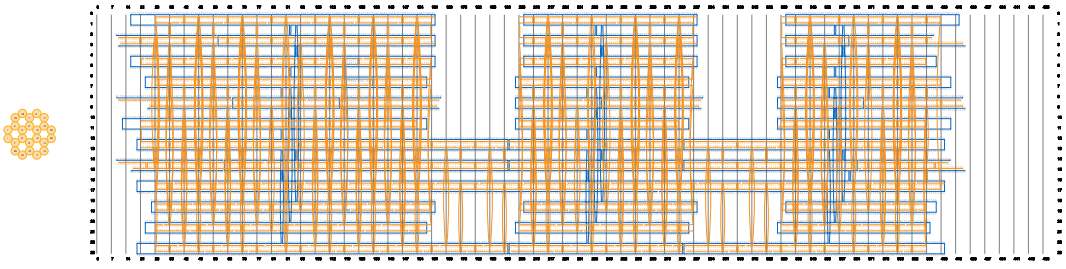

Figure S1g

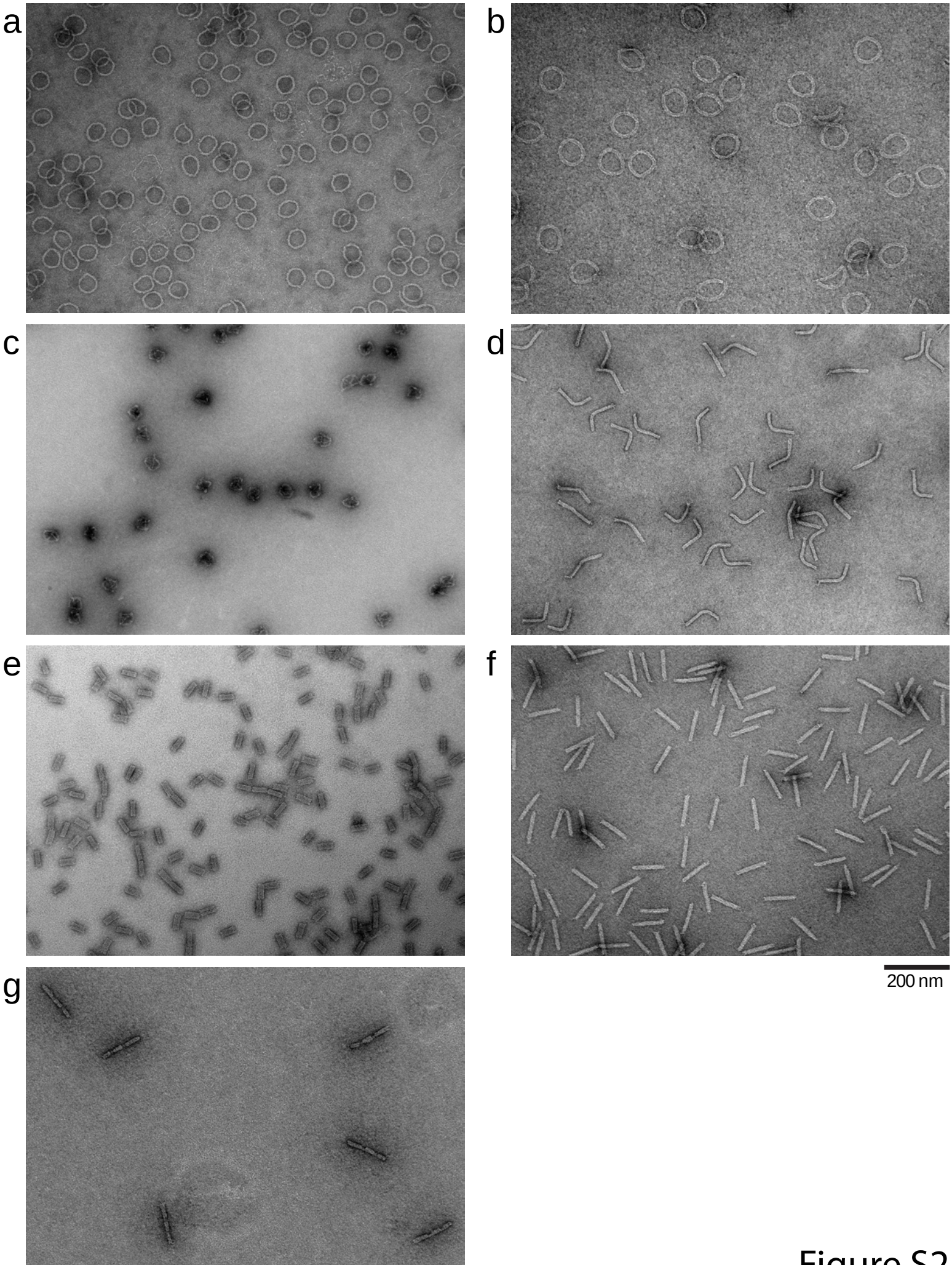

Figure S2

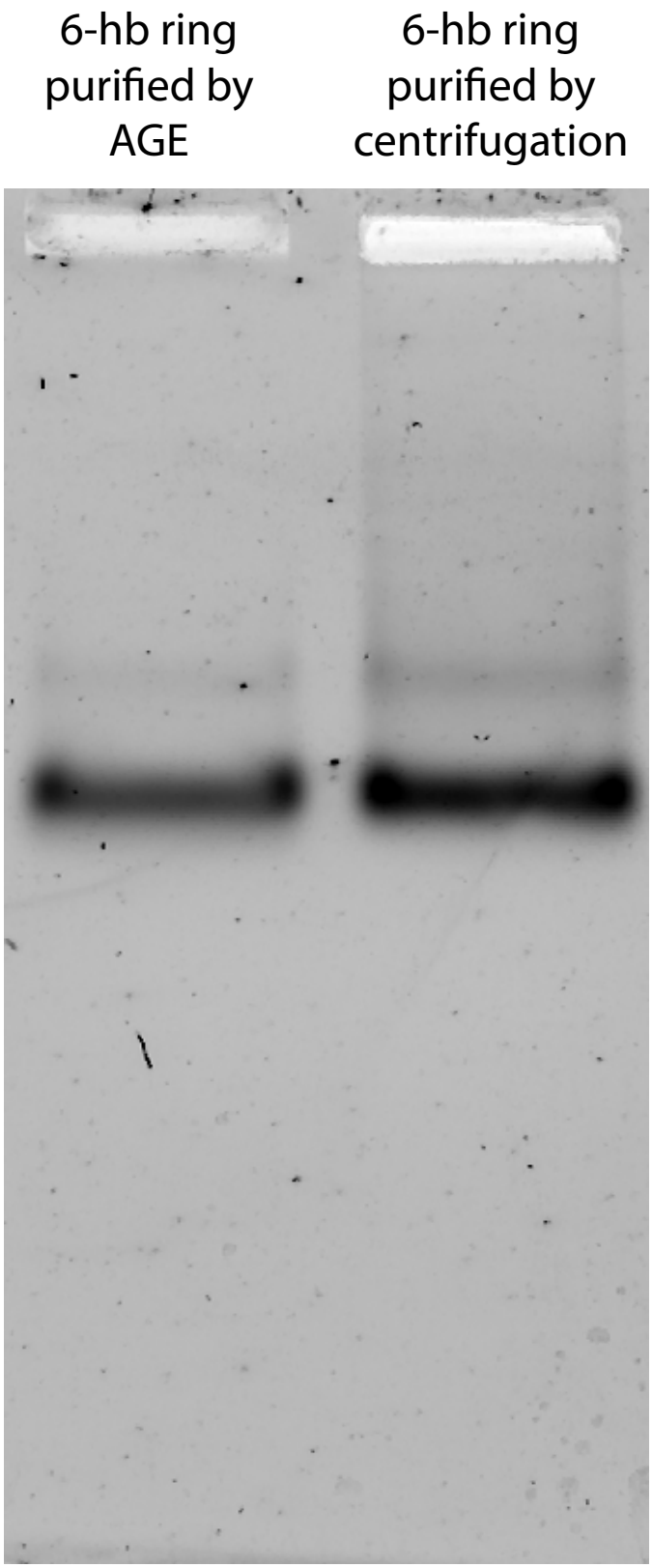
6-hb ring purified by AGE
6-hb ring purified by centrifugation

Figure S3

Figure S4

Supplementary Figure Legends

Figure S1. Strand diagrams of the seven DNA-origami structures used in this work. Scaffold strands are shown in blue and staple strands in orange. (a) 6-helix-bundle (6-hb) ring, (b) 12-hb ring, (c) octahedron with curved 6-hb edges, (d) 18-hb rod with a region (1/3 of full length) bent by 90º, (e) 48-hb brick, (f) 24-hb rod, and (g) 24-hb rod with two cavities.

Figure S2. Representative transmission electron microscope images of the DNA-origami structures purified *via* rate-zonal centrifugation. (a) 6-helix-bundle (6-hb) ring, (b) 12-hb ring, (c) octahedron with curved 6-hb edges, (d) 18-hb rod with a region (1/3 of full length) bent by 90º, (e) 48-hb brick, (f) 24-hb rod, and (g) 24-hb rod with two cavities. Scale bar for all panels: 200 nm.

Figure S3. Side-by-side comparison of DNA-origami 6-hb rings purified by agarose gel electrophoresis (AGE, left) and rate-zonal centrifugation (right).

Figure S4. Representative transmission electron microscope image of 6-hb rings each hosting three 5-nm gold nanoparticles. Scale bar: 200 nm.