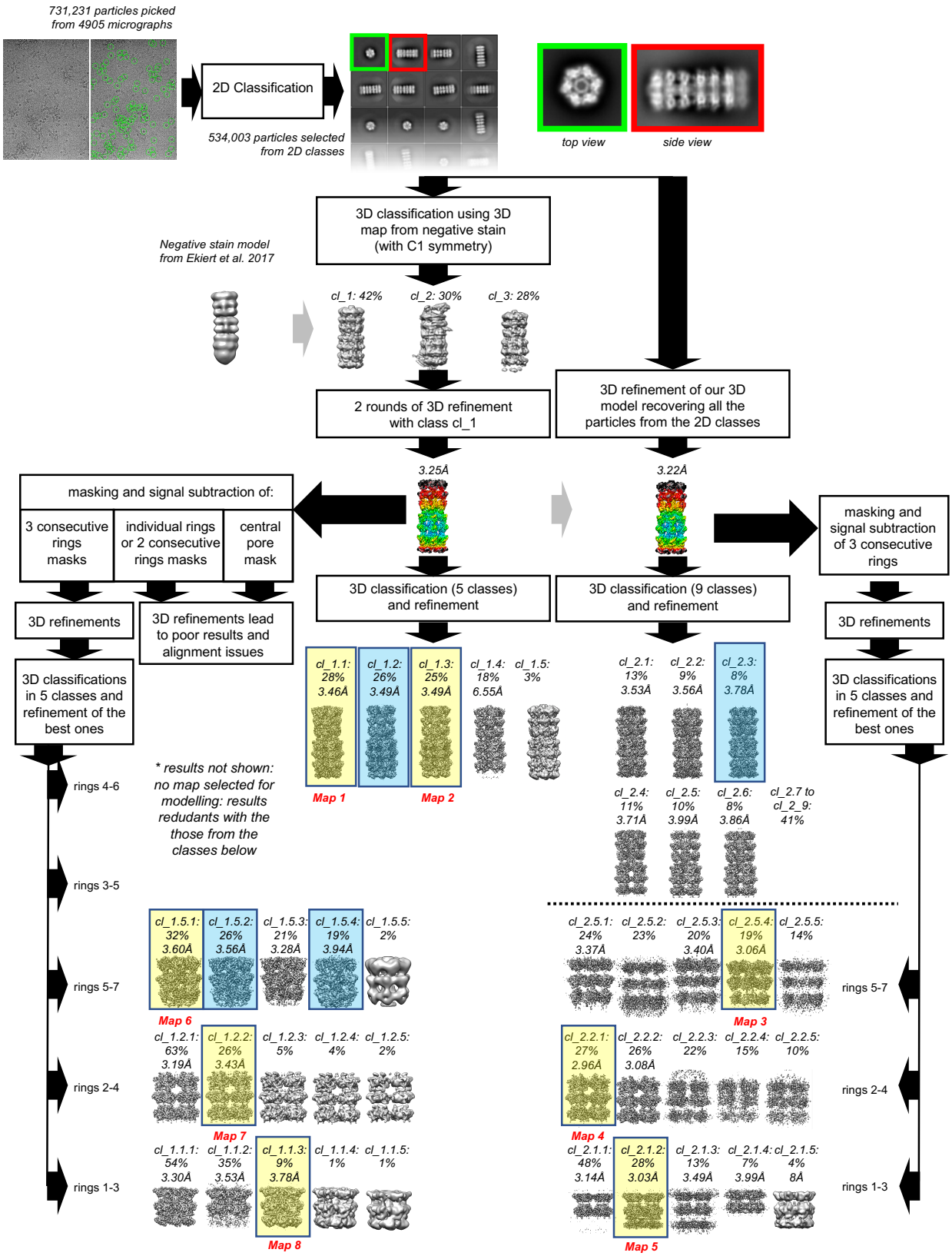
Figure S2


731,231 particles picked from 4905 micrographs
2D Classification
534,003 particles selected from 2D classes
top view
side view
3D classification using 3D map from negative stain (with C1 symmetry)
Negative stain model from Ekiert et al. 2017
cl_1: 42%
cl_2: 30%
cl_3: 28%
2 rounds of 3D refinement with class cl_1
3D refinement of our 3D model recovering all the particles from the 2D classes
3.25Å
3.22Å
masking and signal subtraction of:
3 consecutive rings masks
individual rings or 2 consecutive rings masks
central pore mask
masking and signal subtraction of 3 consecutive rings
3D refinements
3D refinements lead to poor results and alignment issues
3D classifications in 5 classes and refinement of the best ones
3D classification (5 classes) and refinement
3D classification (9 classes) and refinement
cl_1.1: 28% 3.46Å
cl_1.2: 26% 3.49Å
cl_1.3: 25% 3.49Å
cl_1.4: 18% 6.55Å
cl_1.5: 3%
Map 1
Map 2
cl_2.1: 13% 3.53Å
cl_2.2: 9% 3.56Å
cl_2.3: 8% 3.78Å
cl_2.4: 11% 3.71Å
cl_2.5: 10% 3.99Å
cl_2.6: 8% 3.86Å
cl_2.7 to cl_2_9: 41%
* results not shown: no map selected for modelling: results redudants with the those from the classes below
rings 4-6
rings 3-5
rings 5-7
rings 2-4
rings 1-3
cl_1.5.1: 32% 3.60Å
cl_1.5.2: 26% 3.56Å
cl_1.5.3: 21% 3.28Å
cl_1.5.4: 19% 3.94Å
cl_1.5.5: 2%
Map 6
cl_1.2.1: 63% 3.19Å
cl_1.2.2: 26% 3.43Å
cl_1.2.3: 5%
cl_1.2.4: 4%
cl_1.2.5: 2%
Map 7
cl_1.1.1: 54% 3.30Å
cl_1.1.2: 35% 3.53Å
cl_1.1.3: 9% 3.78Å
cl_1.1.4: 1%
cl_1.1.5: 1%
Map 8
cl_2.5.1: 24% 3.37Å
cl_2.5.2: 23%
cl_2.5.3: 20% 3.40Å
cl_2.5.4: 19% 3.06Å
cl_2.5.5: 14%
Map 3
cl_2.2.1: 27% 2.96Å
cl_2.2.2: 26% 3.08Å
cl_2.2.3: 22%
cl_2.2.4: 15%
cl_2.2.5: 10%
Map 4
cl_2.1.1: 48% 3.14Å
cl_2.1.2: 28% 3.03Å
cl_2.1.3: 13% 3.49Å
cl_2.1.4: 7% 3.99Å
cl_2.1.5: 4% 8Å
Map 5