

A) Collection in super resolution mode (super pixel size 0.525 Å), 2836 micrographs

Motion Correction using MotionCor2, 1.5x resampling, 0.7875 Å/pixel

CTF estimation (Ctffind4)

Auto picking (Relion 3.0.7) (See A)
(256,410 particles)

Particle Extraction
(box size 400 pix, rescaled to 40 pix)

Class 2D
(50 classes, 25 iterations)

Particle Select
(132,677 particles)

4x

Particle Extraction
(box size 400 pix, rescale 400 pix)

Class 2D
(50 classes, 25 iterations)

Particle Select
(93,597 particles)

2x

Refine 3D
(C1 symmetry, 3.9 Å)

Focused 3D Classification

Particle Selection
(73,984 particles)

Refine 3D
(C3 symmetry, 3.71 Å)

CTF Refine
(estimating anisotropic magnification)

Refine 3D
(C3 symmetry, 3.79 Å)

Particle Polishing

Refine 3D
(C3 symmetry, 3.75 Å)

3x

CTF Refine

Refine 3D
(C3 symmetry, 2.88 Å)

Particle Subtraction

C3 Particle Expansion
(221,952 particles)

(C1 symmetry, 3.0 Å)

MultiBody Refinement
(2.74 Å)

Phenix Combine Maps

Phenix Autosharpen

