

**Supplementary file 1.** Cryo-EM data acquisition, processing, and atomic model statistics.

<b>Data Collection</b>	<b><math>\Delta</math>N-VAT</b>
Electron Microscope	Tecnai F20
Camera	K2 Summit
Voltage	200 kV
Nominal Magnification	25,000 $\times$
Calibrated physical pixel size	1.45 Å
Total exposure	35 electrons/Å <sup>2</sup>
Exposure rate	5 electrons/pixel/s
Number of frames	30
Defocus range	1.7-2.9 $\mu$ m
<b>Image Processing</b>	
Motion correction software	<i>alignparts lmbfgs</i>
CTF estimation software	CTFFIND4
Particle selection software	Relion 1.4
Micrographs used	246
Particles selected	171,381
3D map classification and refinement software	cryoSPARC
Particles contributing to final map (stacked-rings)	75,205
Applied symmetry (stacked-rings)	C6
Applied B-factor (stacked-rings)	199.5 Å <sup>2</sup>
Global resolution (FSC = 0.143) (stacked-rings)	3.9 Å
Particles contributing to final map (substrate-bound)	13,238
Applied symmetry (substrate-bound)	C1
Applied B-factor (substrate-bound)	218.8 Å <sup>2</sup>
Global resolution (FSC = 0.143) (substrate-bound)	4.8 Å
<b>Model Building</b>	
Modeling software	<i>Coot, Phenix</i>
Number of residues built	3264
RMS (bonds)	0.0037
RMS (angles)	0.96
Ramachandran outliers	0.00 %
Ramachandran favoured	96.49 %
Clashscore	20.17
MolProbity score	2.59
EMRinger score	1.17