

S8 Table. Ribosome-S-D cryo-EM data collection and refinement statistics.

Data collection			
Magnification	80,000		
Voltage (kV)	300		
Electron Microscope	Krios-GIF-K3		
Defocus (um)	-1.0 to -2.5		
Energy filter width (eV)	20		
Pixel size (Å) ^a	1.08 (0.54)		
Total dose (e ⁻ / Å ²)	36		
Number of frames	40		
Number of micrographs	5,245		
Initial particle images (no.)	1,749,230		
Final particle images (no.)	1,251,104		
Refinement	70S P-site-tRNA	70S E-site-tRNA	70S Empty
Total Particles (no.)	144,189	451,971	420,107
<u>GS-FSC Resolution (0.143, Å)^b</u>			
50S	2.39	2.21	2.21
30S Core	2.67	2.45	2.47
30S Head	2.65	2.52	2.51
<u>Model composition</u>			
Chains	53	53	51
Protein residues	5,512	5,512	5,510
Nucleotides	4,447	4,453	4,369
Streptothricin-D	12	11	12
<u>r.m.s.d.</u>			
Bond lengths (Å)	0.005	0.005	0.004
Bond angles (°)	0.663	0.615	0.604
Validation	70S P-site-tRNA	70S E-site-tRNA	70S Empty
MolProbity score	1.69	1.55	1.49
Clash score	4.90	4.61	4.26
<u>Ramachandran plot</u>			
Favored (%)	97.25	97.69	97.67
Allowed (%)	2.55	2.14	2.14
Disallowed (%)	0.20	0.17	0.18
CC Mask	0.93	0.93	0.93

^aSuper-resolution stacks processed in 0.75 resolution instead of 0.5 during motion correction

^bGold-Standard Fourier Shell Correlation; refinements split into three regions for each structure.