

**Table S2. Crystal structure data collection, refinement and validation statistics^a.
Related to Figures 2 and 3.**

	COMMD5-COMMD7-COMMD9-COMMD10	VPS29-VPS35L peptide
Data Collection		
Space group	C2	P212121
Unit cell dimensions (a,b,c) (Å)	215.19 74.89 63.63	43.72 55.28 82.64
Unit cell angles (α,β,γ) (°)	90.00 96.40 90.00	90.00 90.00 90.00
Wavelength (Å)	0.95372	0.95365
Resolution range (Å)	48.02-3.33 (3.60-3.33)	45.95-1.35 (1.37-1.35)
Total reflections	102614 (20743)	277842 (11606)
Unique reflections	14773 (2987)	44459 (1992)
Multiplicity	6.9 (6.9)	6.2 (5.8)
Completeness (%)	99.0 (97.6)	99.1 (91.6)
Mean I/ σ (I)	8.9 (1.3)	11.3 (1.0)
R-merge	0.108 (1.088)	0.07 (1.47)
R-meas	0.127 (1.278)	0.077 (1.61)
R-pim	0.048 (0.480)	0.031 (0.643)
CC(1/2)	0.999 (0.732)	0.998 (0.481)
Refinement		
R-work	0.243 (0.318)	0.219 (0.400)
R-free	0.287 (0.404)	0.246 (0.382)
Number of non-hydrogen atoms	4157	1770
Number macromolecule atoms	4157	1576
Number water atoms	0	194
RMS bonds (Å)	0.002	0.023
RMS angles (°)	0.519	1.95
Ramachandran favored (%)	96.5	97.9
Ramachandran allowed (%)	3.5	2.1
Ramachandran outliers (%)	0	0
Clashscore	2.97	9.8
Overall Molprobit score	1.11	1.7
Average B-factor	141.4	26.7
PDB ID	8ESD	8ESE

a. Statistics for the highest-resolution shell are shown in parentheses.