

Table S1: Data Collection and Refinement statistics

	TEP1*S1	TEP1*R1
<i>Data Collection</i>		
Beamline	NSLS X25C	
Wavelength (Å)	1.1	
Space Group	$P4_3$	
Unit cell (a, b, c) (Å)	196.472; 225.267	
Resolution (Å)	50-3.70 (3.76-3.70)	
Unique reflections	90735 (4503)	
Redundancy	4.9 (5.1)	
Completeness (%)	99.9 (100.0)	
$\langle I \rangle / \langle \sigma \rangle$	22.9 (2.0)	
R_{sym} (%)	7.9 (89.1)	
<i>Refinement</i>		
Resolution (Å)	50.0-3.70 (3.80-3.70)	50.0-2.70 (2.73-2.70)
Reflections:		
Working set	86136 (6181)	68219 (2250)
Test set	4583 (331)	3631 (125)
R_{cryst} (%)	20.0 (30.3)	21.9 (37.7)
R_{free} (%)	24.0 (35.1)	24.4 (43.1)
Est. coord. err. (Å)	0.35	0.37
Rmsd from ideal:		
Bond lengths (Å)	0.015	0.005
Bond angles (°)	1.785	1.018
Avg. B-factor (Å ²)		
Atoms:		
Non-hydrogen	27047	10343
Water		133
Molprobity analysis:		
All-atom clash score	7.29	1.12
Bad rotamers (%)	6.1 (161/2648)	0.4 (5/1134)
Ramachandran plot:		
Outliers (%)	0.6 (21/3540)	0.3 (5/1264)
Favored (%)	94.4 (3345/3540)	95.9 (1212/1274)