

Supplementary Table 1 Data-collection and phasing statistics. Values in parentheses are for the outermost shell.

Proteins	Lysozyme	70028
No. of residues	129	265
No. of Met	2	7
No. of Cys	8	1
Mount tool	Crystal Catcher	Crystal Catcher
Space group	<i>P4₃2₁2</i>	<i>P4₁2₁2</i>
Unit-cell parameter		
<i>a</i> (Å)	78.93	104.30
<i>b</i> (Å)	78.93	104.30
<i>c</i> (Å)	36.96	139.08
Wavelength (Å)	1.54	1.54
Resolution range (Å)	20-1.45 (1.50-1.45)	20-2.3 (2.38-2.30)
No. of unique reflections	21149 (2025)	34724 (3417)
Redundancy	12.6 (10.8)	19.0 (18.9)
Completeness (%)	99.2 (97.4)	100 (100)
$R_{\text{merge}}^{\dagger}$ (%)	3.4 (24.6)	4.2 (13.0)
$\langle I/\sigma(I) \rangle$	18.6 (9.4)	18.4 (13.1)
Mosaicity (°)	0.28	0.34
SAD Phasing	Success	Success
Figure of merit (before solvent flattening)	0.443	0.218
No. of molecules in ASU	1	2
Residues built with side chain (%)	96.1	94.9

$R_{\text{merge}}^{\dagger} = \frac{\sum_{hkl} \sum_i |I_i(hkl) - \langle I(hkl) \rangle|}{\sum_{hkl} \sum_i I_i(hkl)}$, where $I_i(hkl)$ is the i th observation of reflection hkl and $\langle I(hkl) \rangle$ is the weighted average intensity for all observations i of reflection hkl .