

Supporting Table S2. Data collection and structure Solution parameters.

| Crystal type | MG2x1 | MG8-4 | MG8-14 |
|--|--|---|---|
| Unit cell parameters (Å) | a=104.41 b=55.70 c=74.53 $\sigma=90$ $\beta=126.4$ $\gamma=90$ | a=87.07 b=87.07 c=55.73 $\sigma=90$ $\beta=90$ $\gamma=120$ | a=56.20 b=56.20 c=81.52 $\sigma=90$ $\beta=90$ $\gamma=120$ |
| Resolution (Å) | 1.96 – 31.97 | 1.96 – 34.3 | 2.47 – 28.1 |
| Space group | C 2 | P3 2 1 | P3 ₂ 2 1 |
| Completeness (%) | 99.2 (92.5) ^a | 99.3 (86.7) ^a | 99.9 (100) ^a |
| R _{sym} (%) ^b | 9.9 (31.2) | 11.3 (42.3) | 10.3 (31.7) |
| I / σ (%) | 39.1 (9.3) | 48.4 (10.8) | 53.9 (15.0) |
| No. of refined atoms Protein / water | 1794 / 216 | 1783 / 281 | 919 / 44 |
| R _{factor} / R _{free} (%) ^c | 25.2 (29.7) | 17.7 (23.1) | 19.1 (24.5) |
| r.m.s.d bond length (Å) | 0.009 | 0.008 | 0.006 |
| r.m.s.d bond angle | 1.1 | 1.2 | 1.1 |
| Ramachandran plot (%) | | | |
| Most favored region | 98.3 | 96.2 | 99.2 |
| Additionally allowed region | 1.7 | 3.8 | 0.8 |
| Residues in outlier region | 0 | 0 | 0 |

^aNumbers in parentheses are statistics from the highest resolution shell.

^b $R_{\text{sym}} = \sum |I_{\text{obs}} - I_{\text{avg}}| / \sum I_{\text{obs}}$, where I_{obs} is the observed individual reflection and I_{avg} is the average over symmetry equivalents.

^c $R_{\text{factor}} = \sum ||F_o| - |F_c|| / \sum |F_o|$, where $|F_o|$ and $|F_c|$ are the observed and calculated structure factor amplitudes, respectively. R_{free} was calculated using 5% of the data.