

Table 3. Data collection and refinement statistics

Data collection	Se used for refinement	Se (peak)	Se (inflection)	Se (remote)
Space group	P222 ₁	P222 ₁		
Unit cell dimensions, Å	$a = 40.9, b = 46.8,$ $c = 283.1$	$a = 41.0, b = 47.2, c = 283.2$		
Wavelength, Å	1.0000	0.9796	0.9794	0.9719
Resolution limit, Å	2.2	2.4	2.4	2.4
R_{sym} , * %	16.8%	10.8	9.8	10.5
R_{sym} , % (last shell)	34.2	35.6	43.8	42.6
I/σ (last shell)	2.1 (15.1) [†]	2.0	1.8	1.5
Total observations	233,050	120,481	58,582	112,996
Unique reflections	27,342 (20,050)	18,561	17,315	18,154
Completeness, %	92.7 (63.6)	80.8	74.7	78.3
Completeness, % (last shell)	78.6 (30.0)	46.3	35.5	41.9

Phase determination [‡]	Se (peak)	Se (inflection)	Se (remote)
R_{cullis} , § % (20–2.4 Å, acentric/centric, isomorphous)	0.97/0.95	–	0.92/0.85
R_{cullis} , ¶ % (20–2.4 Å, anomalous)	0.76	0.94	0.85
Phasing power (20–2.6 Å, acentric/centric)	0.50/0.35	–	0.72/0.55
Number of sites	11		
Mean overall figure of merit (before/after DM)	0.39/0.60		

Model refinement	Native
R_{work} ** (20–2.1 Å)	24.7
R_{free} †† (20–2.1 Å)	31.2
Protein Data Bank ID code	2G38
Number of residues (protein/water)	499/73
Average B (main chain/side chain)	20.7/22.3
rmsd bonds, Å	0.007
rmsd angles, °	1.4
B values, Å ² bonded	1.6

$$*R_{\text{sym}} = \frac{\sum |I - \langle I \rangle|^2}{\sum I^2}$$

[†]Values in parentheses correspond to statistics after elliptical truncation prompted by severe anisotropy.

[‡]The inflection data set was treated as a reference for phasing. Statistics are reported to 3.3-Å resolution.

[§] $R_{\text{Cullis}} = \Sigma \varepsilon / \Sigma |F_{\text{PH}} - F_p|$, where ε =lack of closure.

[¶] $R_{\text{Cullis}} = \Sigma \varepsilon / \Sigma |F^+ - F^-|$, where ε =lack of closure.

^{||}Phasing power = $\langle F_H / \varepsilon \rangle$.

^{**} $R_{\text{work}} = \Sigma |F_{\text{obs}} - F_{\text{calc}}| / \Sigma F_{\text{obs}}$.

^{††} $R_{\text{work}} = \Sigma |F_{\text{obs}} - F_{\text{calc}}| / \Sigma F_{\text{obs}}$, where all reflections belong to a test set of 5% randomly selected data.