

Table 3. Data collection and refinement statistics of the H3K4Me₃-bound PHD finger.

Data Collection				
	Native	Zn MAD		
Space group	P3 ₂ 21, a=b=49.18, c=52.65Å, α=β=90°, γ=120°, one molecule per A.U.			
		peak	inflection	remote
Resolution (Å)	2.0	2.0	2.0	2.2
Wavelength (Å)	1.54	1.2791	1.2827	1.2730
Redundancy ²	4.4 (4.3)	9.8 (8.1)	8.1 (8.2)	7.8 (7.1)
Completeness (%)	97.0 (79.6) ¹	99.7 (100.0)	99.8 (100.0)	99.8 (99.7)
Rmerge ³	0.039 (0.094)	0.080 (0.180)	0.097 (0.358)	0.111 (0.376)
I/σ(I)	51.1 (18.5)	50.4 (22.5)	45.1 (11.8)	43.0 (14.4)
Refinement Statistics (F >0)				
Resolution (Å)	30-2.0			
R _{working} (number of reflections)	0.223			
R _{free} ⁴ (number of reflections)	0.231			
Number of protein atoms	491			
Number of non-protein atoms	32 water molecules and 2 zinc ions			
R.m.s.d. from ideal bond length (Å)	0.006			
R.m.s.d. from ideal bond angle (o)	1.080			
Ramachandran statistics	Most favored 39 residues	Additoinally allowed 7 residues	Generously allowed 1 residues	Disallowed ⁵ 1 residue

¹ The completeness of the 2.0-1.9Å resolution shell falls to 38% so we decided to use the 2Å data set for further refinement.

² Numbers in parenthesis represent values for the highest resolution bin.

³ $R_{\text{merge}} = \sum |I_{\text{obs}} - I_{\text{avg}}| / \sum I_{\text{avg}}$.

⁴ R_{free} was calculated with 10% of reflections.

⁵ Residue Glu237 is clearly in a conformation which Phi/Psi values fall into the disallowed region of the Ramachandran plot.