

Table. Crystallographic details.

A. Three different crystal forms used in the initial low-resolution phasing.

spacegroup	a × b × c (Å); α , β , γ	AU contents	% solvent
P3 ₁ 12	96 × 96 × 280; 90°, 90°, 120°	monomer	67%
P4 ₂ 2 ₁ 2	199 × 199 × 75; 90°, 90°, 90°	monomer	67%
P2 ₁	96 × 154 × 104; 90°, 114°, 90°	dimer	65%

B. Data collection- Three individual datasets from one monoclinic (P2₁) crystal

data-set	beam line	wave-length		Detector Distance	Detector (mode)	# images	reso-lution	# unique reflections	R-sym
1	SSRL 7-1	1.08	1*	400	mar345(300)	205	21.8 - 3.3	35,658	0.127
2	ALS 5.02	1.10	1*	240	ADSC-Q4	180	20.0 - 3.3	36,140	0.092
3	ALS 5.02	1.10	1*	240	ADSC-Q4	180	59.8 - 3.8	26,460	0.116

C. Data reduction- merged dataset

resolution	3.8	3.5	3.3
unique refln	26,590	33,596	39,079
completeness, (last shell)	98.7% (96%)	97.6% (94%)	95.3 (59%)
redundancy ¹	2.88	2.68	2.51
$\langle I \rangle / \langle \sigma \rangle$	9.5 (7.1)	8.5 (3.9)	7.0 (1.1)
R-merge	0.115 (.29)	0.120 (0.28 ²)	.122 (.28 ²)
"optical" resol. ³	2.69	2.52	2.45
B _{wilson} ⁴	-	-	59.0

1. Actual redundancy is higher because three pre-merged sets are combined here.

2. Note last shell has redundancy <2 so R-merge underestimates variability

3. Optical resolution as defined by Vaguine (Acta Cryst. D55, 191-205, 1999) and reported by sfccheck program

4. Wilson plot from truncate program, 4.0 to 3.3 Å

D. Refinement- merged dataset

resolution	59.8 - 3.8	59.8 - 3.5
# atoms	13252	13252
F/ σ_F cutoff	0	0
# reflections	26,318	33,264
completeness	98.8%	97.6%
test set (%)	1323 (5.0%)	1661 (5.0%)
R _{crvs} (last shell)	0.295 (0.41)	0.302 (0.42)
R _{free} (last shell)	0.345 (0.45)	0.358 (0.53)
iso B _{overall}	86.3	88.1
aniso B ₁₁	-37	-34
aniso B ₂₂	+92	+87
aniso B ₃₃	-55	-53
RMSD (angles)	2.6	2.6
RMSD (bonds)	0.031	0.032
RMSD (dihedr)	23.9	23.9
ESD coord error ¹	0.68	0.73
NCS model	strongly restrained	

1. From cross-validated Luzatti plot, low cutoff 5.0 Å