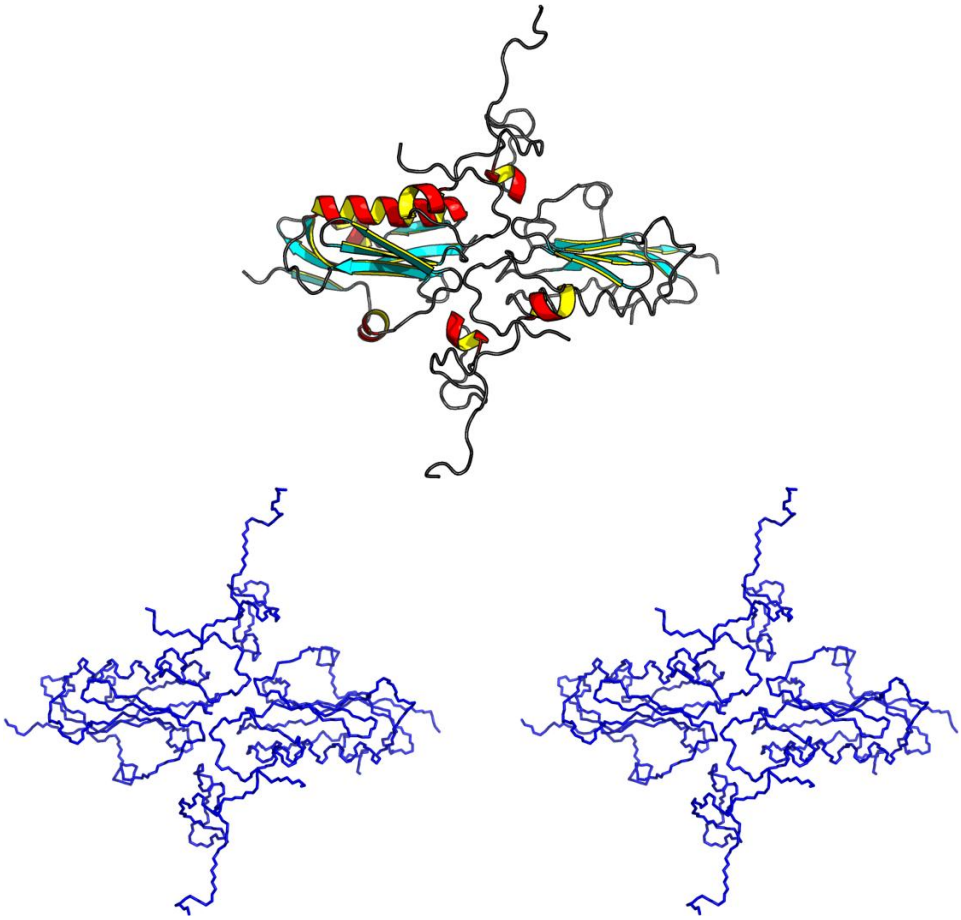
Structure Quality Analysis for NAME

Procheck analysis,RMSD calculation and structure superimposition are based on: all residues

NESG ID:	NAME
PDB ID:	
Deposition date:	
Common Name:	
Class:	
Length (a.a.):	361
Organism:	
SwissProt / TrEMBL ID:	
Oligomerization:	tetramer
Molecular weight:	41589



Secondary Structure Elements:
Inter-chain break(s) between 203 & 214, 332 & 343, 405 & 416
alpha helices: 95A-99A, 171A-187A, 196A-201A, 95B-99B, 171B-187B, 196B-201B, 69C-72C, 97C-102C, 69D-72D, 97D-102D
beta strands: 88G-91G, 127N-137N, 191R-194R, 107O-112O, 115U-120U, 140G-151G, 156E-162E, 88G-91G, 127N-137N, 191R-194R, 107O-112O, 115U-120U, 140G-150G, 156E-162E

Resolution: 1.950 Å R-factor: 0.210 R-free: 0.234
Structure Factors deposited in the PDB? no

Ramachandran Plot Summary from Procheck

Most favoured regions	*Additionally allowed regions*	*Generously allowed regions*	*Disallowed regions*
92.1%	7.9%	0.0%	0.0%

Ramachandran Plot Summary from Richardson Lab's Molprobity

Most favoured regions	*Allowed regions*	*Disallowed regions*	View plot	View model summary
98%	1.7%	0.3%		

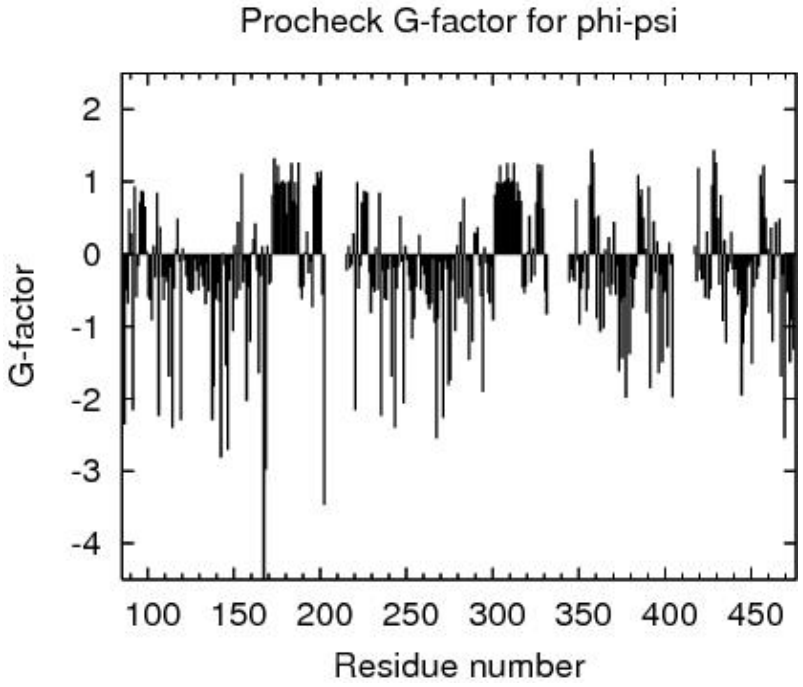
Global quality scores

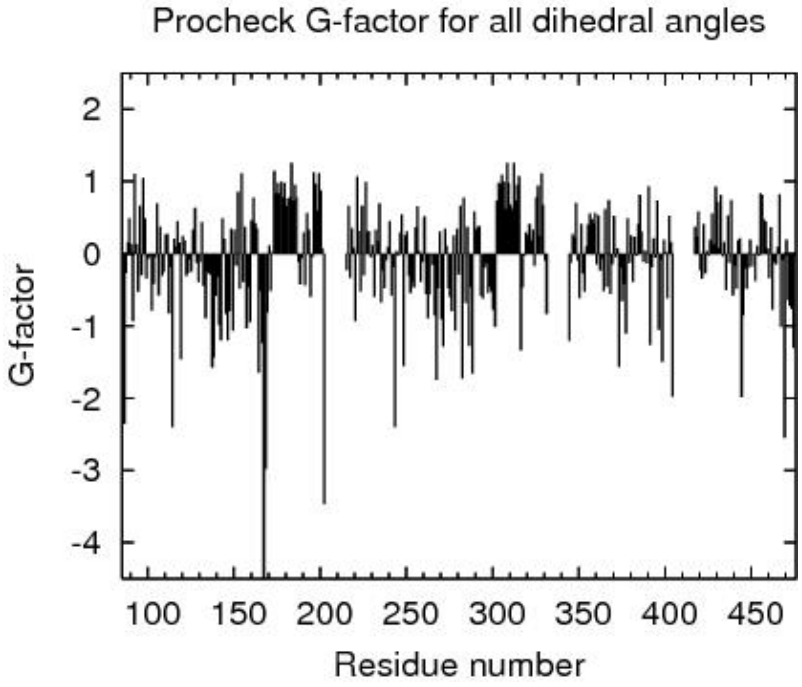
Program	*Verify3D*	*ProsaII (-ve)*	*Procheck (phi-psi)*	*Procheck (all)*	*MolProbity Clashscore*
-Raw score	0.39	0.42	-0.24	-0.07	10.72
Z-score[1]	-1.12	-0.95	-0.63	-0.41	-0.31

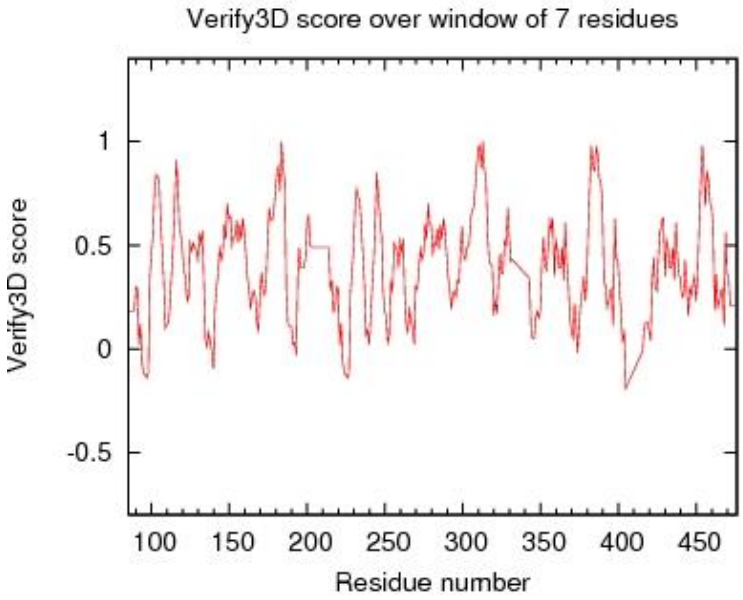
Close Contacts and Deviations from Ideal Geometry (from PDB validation software)

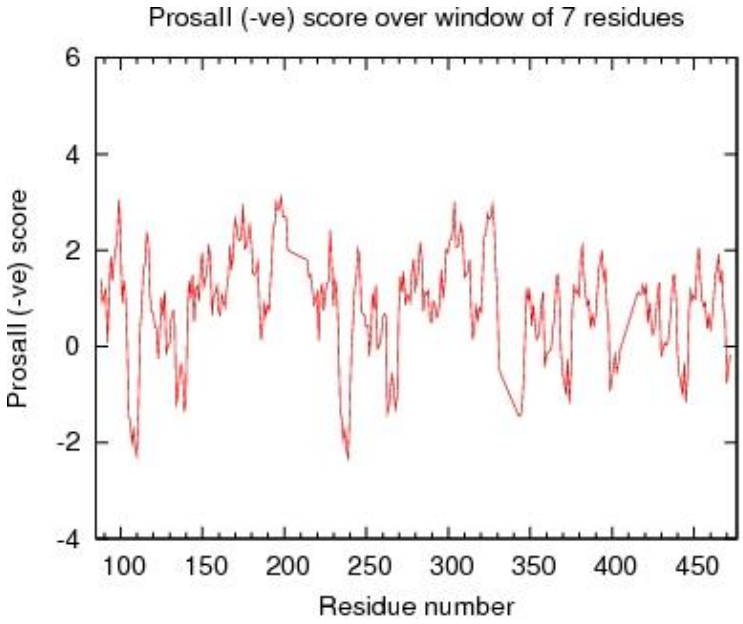
Number of close contacts (within 2.2 Å):	0
RMS deviation for bond angles:	1.4 °
RMS deviation for bond lengths:	0.007 Å

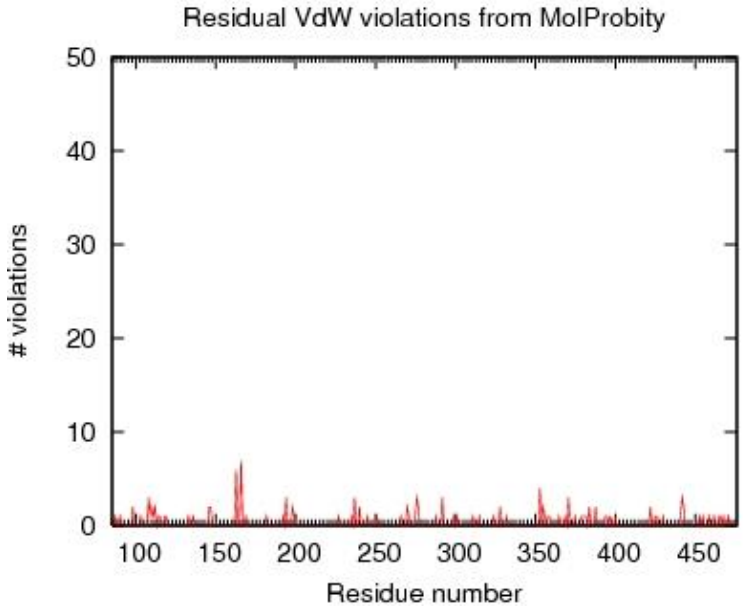
[1] With respect to mean and standard deviation for a set of 252 X-ray structures < 500 residues, of resolution <= 1.80 Å, R-factor <= 0.25 and R-free <= 0.28; a positive value indicates a 'better' score

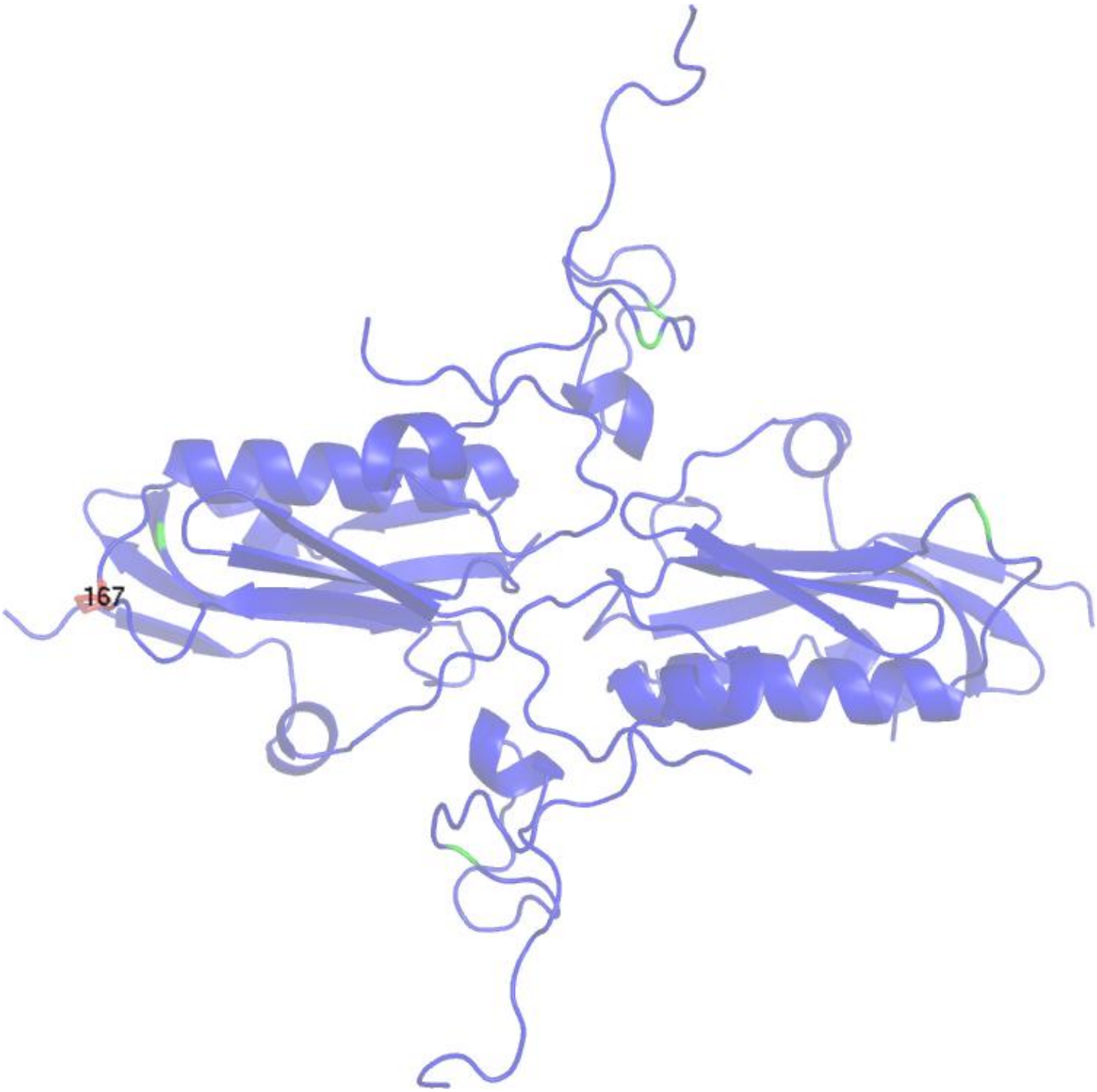



Procheck G-factor for all dihedral angles
G-factor
2
1
0
-1
-2
-3
-4
100
150
200
250
300
350
400
450
Residue number


Verify3D score over window of 7 residues
Verify3D score
1
0.5
0
-0.5
100
150
200
250
300
350
400
450
Residue number


Prosall (-ve) score over window of 7 residues
Prosall (-ve) score
6
4
2
0
-2
-4
100
150
200
250
300
350
400
450
Residue number


Residual VdW violations from MolProbity
violations
50
40
30
20
10
0
100
150
200
250
300
350
400
450
Residue number



Residue Plot of Ramachandran anlysis(based on data from Richardson Lab's Molprobity)

References:

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3. Sippl M J, "Recognition of Errors in Three-Dimensional Structures of Proteins", Proteins 17 (1993): 355-362
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5. Laskowski R Ai et al, "AQUA and PROCHECK_NMR: Programs for checking the quality of proteins structures solved by NMR", J Biomolec NMR 8 (1996): 477-486
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Analysed by on May-10-2013 using PSVS 1.3

Software Environment

Software for structure quality evaluation:

DSSP	DsspCMBI-April-2000
pdbstat	PdbStat-5.4 Version
AutoAssign	Version 2.4.0 (uses only AVS scripts)
RPF analysis	ASDP-1.0
PDB validation	Version 8.061
Verify3D	Version 1.0 corrected by Aneerban
ProsaII	Prosa2003
PROCHECK	Version 3.5.4
MolMol	Version 2K.2

MolProbity programs:

cluster	1999
clashlistcluster	1999 (corrected by Aneerban)
mage	Version 6.35.040409
prekin	Version 6.35.040406
reduce	Version 2.14
probe	Version 2.6

Other Software:

PERL	Version 5.8.0
convert	ImageMagick 5.5.6
ps2pdf	Ghostscript 7.05
htmldoc	v1.9
gnuplot	Version 3.7 patchlevel 3
jpegtopnm	year 2000
pnmcrop	year 2000
pnmtojpeg	year 2000