Supporting Information for World Wide Web Edition

Table 1. Comparison of structures calculated with and without calcium and H-bond constraints.

Model	Coordinate Precision	
Omit Ca	RMSD to Mean (Backbone Atoms) ^a	0.59 Å
	RMSD to Mean (Heavy Atoms) ^a	1.13 Å
	RMSD to final reported structure (Backbone Atoms) ^b	0.55 Å
	RMSD to final reported structure (Heavy Atoms) ^b	1.20 Å
Omit H-bonds	RMSD to Mean (Backbone Atoms) ^a	0.61 Å
	RMSD to Mean (Heavy Atoms) ^a	1.12 Å
	RMSD to final reported structure (Backbone Atoms) ^b	0.49 Å
	RMSD to final reported structure (Heavy Atoms) ^b	1.21 Å
Omit Both	RMSD to Mean (Backbone Atoms) ^a	0.70 Å
	RMSD to Mean (Heavy Atoms) ^a	1.20 Å
	RMSD to final reported structure (Backbone Atoms) ^b	0.84 Å
	RMSD to final reported structure (Heavy Atoms) ^b	1.44 Å
Include Both	RMSD to Mean (Backbone Atoms) ^a	0.55 Å
	RMSD to Mean (Heavy Atoms) ^a	1.01 Å

^a residues 215-249. ^b residues 215-247.

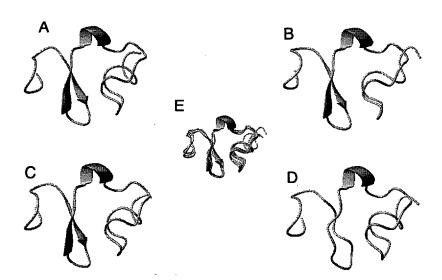


Figure 1. Ribbon representations of minimized mean structures of LR6* calculated when different sets of distance constraints are omitted from the calculations. A. Model calculated as reported in the text. B. Model calculated omitting explicit H-bond constraints. C. Model calculated without a calcium ion or constraints to specify the octahedral calcium binding-site geometry. D. Model calculated when H-bond and calcium coordination constraints are both omitted from the calculations. E. Best-fit superposition of models A-D.