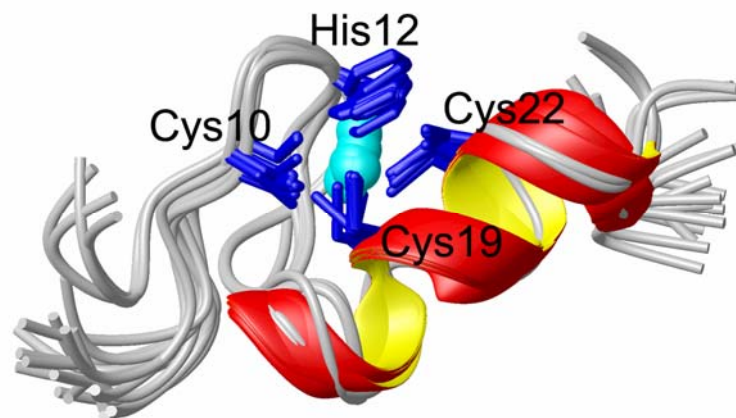


CESG ORF No.	79761	
Organism	<i>Mengo encephalomyocarditis</i>	
Gene Designator	ZN-finger Mengo-L	
PDB Entry	2BAI	Deposition: 14-Oct-2005
BMRB Entry	6863	Deposition: 24-Jan-2006
Function	zinc finger domain of mengovirus leader polypeptide	
Produced From	<i>E. coli</i> BL-21 (DE3)	
Structure by NMR	Restraints/Residue: 12.8	Subunits/Molecule: 1
	No. of Residues: 24	Molecular Weight: 2.8 kDa
	Backbone RMSD(14-120,126-152): 0.67 Å	All Heavy Atoms RMSD(14-120,126-152): 1.10 Å
Data Collected At	Nuclear Magnetic Resonance Facility at Madison (NMRFAM)	
Authors	Cornilescu, C.C., Porter, F.W., Qin, Z., Lee, M.S., Palmenberg, A.C., Markley, J.L.	



Structural Features

The Leader protein is a defining feature of picornaviruses from the *Cardiovirus* genus. This protein was recently shown to inhibit cellular nucleocytoplasmic transport through an activity mapped to its zinc-binding region. Here we report the three-dimensional solution structure determined by nuclear magnetic resonance (NMR) spectroscopy of this domain (residues 5-28) from mengovirus. The domain forms a CHCC zinc-finger with a fold comprising a beta-hairpin followed by a short alpha-helix that can adopt two different conformations. This structure is divergent from those of other eukaryotic zinc-fingers and instead resembles motifs found in a group of DNA-binding proteins from Archaea.

References: (1) Cornilescu, C.C., Porter, F.W., Zhao, K.Q., Palmenberg, A.C., Markley, J.L. (2008) NMR structure of the mengovirus Leader protein zinc-finger domain. *FEBS Lett* 582(6):896-900.

Percent Identity with Nearest PDB Structure at Time Solved	0%
Pfam Cluster	None
Sequence Family Size	26

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