

NMR assignment of the Leucine-Rich Repeat domain of LANP/Anp32a

Cesira de Chiara · Geoff Kelly · Thomas A Frenkiel ·
Annalisa Pastore

Received: 21 July 2006 / Accepted: 6 October 2006 / Published online: 16 December 2006
© Springer Science+Business Media B.V. 2007

The Leucine-rich repeat Acidic Nuclear Protein (LANP/Anp32a) is a member of the Anp32 family of acidic nuclear phosphoproteins, which is characterized by the presence of an amino terminal domain containing leucine-rich repeats (LRR) and of a carboxyl-terminal low complexity acidic region (Chen et al. 1996; Matilla and Radrizzani 2005). Members of the family have been associated with different activities, i.e., tumour suppression, RNA shuttling, transcriptional regulation, modulation of apoptosis and cerebellar morphogenesis. The LRR N-terminus of LANP/Anp32a is a structural domain that is crucial for protein-protein interactions and accounts for the interaction with several partners including the nuclear

export receptor CRM1, and the neurodegenerative disease-related protein ataxin-1. As the first step to the structure determination of LANP/Anp32a we report the virtually complete assignment of the backbone and side-chain ^1H , ^{13}C and ^{15}N nuclei of the LRR domain (1-164). The data are deposited in BMRB with accession number 7081.

References

- Chen et al. (1996) Mol Biol Cell 7:2045–2056
Matilla, Radrizzani (2005) The Cerebellum 4:7–18

Electronic supplementary material The online version of this article (doi: 10.1007/s10858-006-9101-2) contains supplementary material, which is available to authorized users.

C. de Chiara · G. Kelly · T. A. Frenkiel ·
A. Pastore (✉)
National Institute for Medical Research, The Ridgeway-
London NW7 1AA, UK
e-mail: apastor@nimr.mrc.ac.uk