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Letters to the Editor

^{1}H, ^{13}C and ^{15}N resonance assignments of the backbone and methyl groups of the 24 kDa tetratricopeptide repeat domain in $p67^{phox}$

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Tetratriopeptide repeat (TPR) domain in $p67^{phox}$, is one of the components of phagocyte NADPH oxidase, that plays a pivotal role in the activation process of the NADPH oxidase by interacting GTP-bound Rac (Koga et al., 1999). To characterize the structural properties of the TPR domain and to identify the residues essential for Rac-binding, we initiated NMR assignments of the backbone and methyl groups of the 24 kDa TPR ($p67^{phox}$; 1–203). We performed 2D and 3D heteronuclear NMR experiments using a Val, Leu, Ile ($\delta 1$) methyl ^{1}H, $^{2}H/^{13}C/^{15}N$ labeled TPR, etc. In total, 98% of the $^{1}H^{N}$, ^{15}N resonances of backbone amide groups, and 99% of the $^{13}C'$, $^{13}C^{\alpha}$ and $^{13}C^{\beta}$ resonances were assigned. In addition, the $^{1}H/^{13}C$ methyl resonances of Val and Leu residues and those of δ methyl resonances of Ile residues were assigned. BMRB deposit with accession number 6399.

References: Koga, et al. (1999) *J. Biol. Chem.*, **274**, 25051–25060

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Resonance assignment of ABA-1A, from *Ascaris suum* nematode polyprotein allergen

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Nematode polyprotein allergens (NPAs) are ~15 kDa lipid-binding proteins produced by parasitic worms and by the free-living nematode *C. elegans* (Kennedy, 2000). Synthesised as a single polypeptide chain of tandemly repetitive units, the functional units are cleaved from the parent molecule at conserved amino acid tetrads (RXRR). We are investigating the structure of ABA-1A, a unit of the *Ascaris suum* NPA to understand the structural determinants of NPA lipid-binding and how these differ from mammalian FABPs. 2D and 3D heteronuclear spectra were used to assign uniformly ^{15}N,^{13}C-labelled recombinant ABA-1A (McDermott et al., 2001) saturated with oleic acid. Assignment is essentially complete, with the exception of the carbonyl carbons, the N-terminal residues up to F3 and the C-terminal residues H132, T133. The amide resonance of D51 was not observed. Most other missing assignments are of lysine $C_{\varepsilon}H_{\varepsilon}$ groups that are too overlapped to be resolved. Assignments deposited with BMRB accession number 6333.

References: Kennedy, M.W. (2000) *Biochim. Biophys. Acta.*, **1476**, 149–164; McDermott et al. (2001) *Biochemistry*, **40**, 9918–9926

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