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Letter to the Editor

NMR assignment of the C-terminal ADF-H domain of an actin monomer binding protein, twinfilin

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Twinfilin is a ubiquitous protein that regulates the dynamics of the actin cytoskeleton. It is composed of two ADF-H domains, connected by a long linker region and followed by a ~35 residue C-terminal tail region. The tail region interacts with heterodimeric capping protein and this interaction is required for twinfilin's correct sub-cellular localization in yeast (Falck et al., 2004). Both ADF-H domains bind to actin monomers, but the C-terminal domain (Twf-C) with higher affinity (Ojala et al., 2002). Here we report the ^{1}H, ^{15}N and ^{13}C resonance assignment of Twf-C, which is 98.5% complete. 2D and 3D experiments were performed with uniformly ^{15}N and ^{13}C-enriched protein sample. Only signals of N-terminal residue and HN of Ile8 and Met85 were not detectable. Aromatic C^{ξ}/H^{ξ} side-chain $^{1}H/^{13}C$ chemical shifts of Phe6, Phe65, Phe133 and $C^{\epsilon}/H^{\epsilon}$ of Tyr26, Phe64, Phe65 and Phe133 out of 14 aromatic residues remained unassigned. All other side-chain ^{1}H, ^{13}C and ^{15}N chemical shifts were assigned. BMRB deposits with Accession No. 7172.

References: Falck et al. (2004) *EMBO J.*, **23**, 3010–3019; Ojala et al. (2002) *Mol. Biol. Cell*, **13**, 3811–3821.

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