

Letter to the Editor

NMR assignment of the Spinophilin PDZ domain (493–602)

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The multi-domain scaffolding protein spinophilin (Allen et al., 1997) is one of the key regulator and targeting proteins in the post synaptic density. It targets Protein Phosphatase 1 (PP1) to its cellular point of action. This targeting is responsible for the PP1-mediated regulation of glutamatergic AMPA/NMDA channel activity (Greengard, 2001). Based on primary sequence comparison we identified the PDZ domain of Spinophilin (493–602). To gain insight into the structural features and to screen for possible interaction partners we initiated an NMR investigation. We used heteronuclear 2D and 3D NMR experiments, using ^{13}C , ^{15}N labeled Spinophilin_{493–602}, for the chemical shift assignment. The ^1H , ^{13}C and ^{15}N assignments of Spinophilin_{493–602} are essentially complete (more than 97% carbon and 95% proton) with the exceptions being the nitrogen and amide proton of G1, H2, R81, R88 and E108, the ϵ CH₃ of M3, 24, 30 and 90, and the H α 2/3 of G2. Also missing are the aromatic carbon chemical shifts and the H ζ of F6, 75 and 89. BMRB deposit with accession number 6927.

Reference: Allen et al. (1997) *Proc. Natl. Acad. Sci. USA* **94**, 9956–9961; Greengard (2001) *Science* **294**, 1024–1030

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