

Letter to the Editor

¹H, ¹⁵N, and ¹³C resonance assignment of the C2A domain of rabphilin3A

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Rabphilin 3A is a neuronal protein involved in the calcium dependent neurotransmitter release process (Südhof, 2004). Its precise function remains to be elucidated. It contains a N-terminal domain responsible for its binding to the vesicle attached small GTPase Rab3A, and a C-terminal C2 domain tandem, namely the C2A and the C2B, involved in its calcium dependent binding to biological membranes. The crystal structure of the Rab binding domain and the NMR structure of the C2B domain are known. C2 domains are domains found in more than 200 mammalian proteins involved in signal transduction and membrane trafficking. Their common fold consists of a β -sandwich formed by two four stranded β -sheets (Nafelski and Falke, 1996). Here we report the backbone and side chain ¹H, ¹³C and ¹⁵N resonance assignments of the C2A domain (residue 371–510) of mouse rabphilin3A. All backbone ¹H^N-¹⁵N resonances except for S414 were assigned. The completeness of the resonance assignment is 98% for the backbone, and 92% for the side chains (excluding ¹H^N-¹⁵N and ¹⁵N of Lys and Arg, OH, side chain ¹³C' and aromatic quaternary ¹³C). The chemical shift data have been deposited in the BioMagResBank (<http://www.bmrwisc.edu>) under accession number 6787.

References: Nafelski and Falke (1996) *Protein Sci.*, **12**, 2375–2390; Südhof (2004) *Annu. Rev. Neurosci.*, **27**, 509–547.

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