

Letter to the Editor

¹H, ¹³C and ¹⁵N assignments of the KorA global transcriptional repressor protein from the low copy number IncP-1 plasmid, RK2

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KorA is a global repressor protein from the IncP-1 plasmid RK2, which carries antibiotic resistance genes across many bacterial species. It regulates transcription of genes for replication or stable inheritance of the plasmid, interacting co-operatively with other repressors (Kostelidou et al., 1999). KorA contains a helix-turn-helix DNA binding motif but is otherwise not homologous to any structurally-defined protein and appears to have a novel dimerisation motif and possibly a novel fold (Bhattacharyya and Figurski, 2001). We have begun NMR studies of the protein to determine its structure and the molecular basis of its interactions with DNA and with other regulator proteins. 2D and 3D experiments were used with uniformly ¹³C, ¹⁵N labeled KorA. KorA contains 101 amino acids. All of the backbone resonances were assigned, except for M1 and the NH groups of K2 and Q22 which were not observed. 85% of the side chain resonances were also assigned. BMRB deposit accession number 6999.

References: Bhattacharyya and Figurski (2001) *J. Mol. Biol.*, **310**, 51–67; Kostelidou et al. (1999) *J. Mol. Biol.*, **289**, 211–21.

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