

Letters to the Editor

Backbone resonance assignments for the Fv fragment of catalytic antibody 6D9 complexed with a transition state analogue

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The catalytic antibody 6D9, which was induced by immunization with chloramphenicol phosphonate (a transition-state analogue, TSA, for the reaction), catalyzes the hydrolysis of a non-bioactive chloramphenicol monoester to generate the chloramphenicol (Miyashita et al., 1993). To understand the structure-catalytic activity relations of 6D9, we carried out NMR analyses of an Fv fragment of 6D9, which consists of a 114-residue light chain (V_L) and a 122-residue heavy chain (V_H), complexed with TSA. For the assignments 2D and 3D heteronuclear NMR experiments with V_L - and V_H -selectively $^2\text{H}/^{13}\text{C}/^{15}\text{N}$ labeled Fvs were used. The extent of backbone resonance assignments is 99% and 84% for V_L and V_H , respectively. BMRB deposit with accession number 6785.

Reference: Miyashita et al. (1993) *Proc. Natl. Acad. Sci. USA*, **90**, 5337–5340.Masayoshi Sakakura^a, Hideo Takahashi^b, Hiroaki Terasawa^a, Kou Takeuchi^a, Ikuo Fujii^c & Ichio Shimada^{a,b,*}

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Resonance assignments of the two N-terminal RNA recognition motifs (RRM) of the human heterogeneous nuclear ribonucleoprotein F (HnRNP F)

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HnRNP F is a 45 kDa protein containing two N-terminal and one central RRM domains (Honore et al., 1995). It recognizes specifically poly-G RNA sequences (G-tracts) that are frequent *cis*-acting elements important for splicing regulation (Grabowski, 2004). Mutations in HnRNP F binding sites have been correlated with many diseases. We initiated a structural study of a complex between HnRNP F and RNA containing G-tracts using NMR spectroscopy and decided to focus on the two N-terminal RRM domains of HnRNP F (residues 1-194). Almost all ^{15}N , ^{13}C and ^1H atoms have been assigned, except a few residues located at the N-terminus. In total, 94% of all observable atoms were assigned. The backbone and side-chain chemical shifts have been deposited in the BioMagResBank database (accession number 6745).

References: Grabowski (2004) *Biochem. Soc. Trans.*, **32**, 924–927; Honore et al. (1995) *J. Biol. Chem.*, **270**, 28780–28789.

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