

## Letters to the Editor

## NMR assignment of the chicken prion protein fragments chPrP(128-242) and chPrP(25-242)

Based on 30% sequence identity, chPrP(25–242) was identified as the *Gallus gallus* (chicken) homologue of the mammalian prion protein (PrP) (Harris et al., 1992), which is linked to transmissible spongiform encephalopathies (TSE). To gain further insight into PrP function and its role in TSEs, we initiated a NMR structure determination of the recombinant polypeptides chPrP(25–242) and chPrP(128–242), which correspond to mature full length mammalian PrPs and a C-terminal globular domain thereof (Riek et al., 1997). 2D and 3D heteronuclear NMR experiments with <sup>13</sup>C, <sup>15</sup>N-labeled chPrP(128–242) and chPrP(25–242) were used. The <sup>1</sup>H, <sup>13</sup>C and <sup>15</sup>N assignments of chPrP(128–242) are essentially complete, the exceptions being the carbonyl carbons, the  $\alpha$ CH groups of D159, S160 and Q218,  $\beta$ CH<sub>2</sub> of S160 and E228,  $\gamma$ CH<sub>2</sub> of Q218, and  $\epsilon$ CH<sub>3</sub> of M136. In the N-terminal tail of residues 25–127 in chPrP(25–242), four identical hexarepeats with residues 50–73 could not be individually assigned. BMRB deposits with accession numbers 6269 (chPrP(128–242) and 6270 (chPrP(25–242)). References: Harris et al. (1992) *Proc. Natl. Acad. Sci. USA*, **88**, 7664–7668; Riek et al. (1997) *FEBS Lett.*, **413**, 282–288.

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## NMR assignment of the turtle prion protein fragment tPrP(121-225)

Based on about 30% sequence identity, tPrP has been identified as the *Trachemys scripta* (turtle) homologue of the mammalian prion protein (PrP) (Simonic et al., 2000), which is linked to the occurrence of transmissible spongiform encephalopathies (TSE). To gain a better understanding of the still enigmatic function of PrP in healthy organisms and its role in TSEs, we initiated a NMR structure determination of the recombinant polypeptide tPrP(121–225), which corresponds to a C-terminal globular domain of mammalian PrPs (Riek et al., 1997). For the assignments we used 2D and 3D heteronuclear NMR experiments with uniformly <sup>13</sup>C, <sup>15</sup>N-labeled tPrP(121–225). The assignments for <sup>1</sup>H, <sup>13</sup>C, and <sup>15</sup>N of tPrP(121–125) are essentially complete, the exceptions being the carbonyl carbons, the aromatic carbons,  $\beta$ CH<sub>2</sub> of S154, and  $\gamma$ CH<sub>2</sub> of E202 and Q220. BMRB deposit with accession number 6282.

References: Simonic et al. (2000) FEBS Lett., 469, 33–38: Riek et al. (1997) FEBS Lett., 413, 282–288.

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