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Letter to the Editor

NMR assignments of the middle domain of human polypeptide release factor eRF1

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Human polypeptide release factor eRF1 is the protein (49 kDa) involved in termination of translation, the final stage of polypeptide biosynthesis (see e.g. Kisselev et al., 2003). The protein contains three domains (Song et al., 2000). The N-terminal domain is involved in stop codon recognition and the middle domain (M-domain) triggers hydrolysis of peptidyl-tRNA ester bond at the peptidyl transferase centre of the ribosome. The mechanism of the termination of translation is still poorly understood and how a stop signal is passed from the small to the large ribosomal subunit to hydrolyze the peptidyl-tRNA remains unclear. Knowledge of the structure and dynamics of eRF1 domains in solution is important for understanding these mechanisms. We report nearly complete NMR assignments (>91% backbone, >85% side chains) of the M-domain (136 a.a.) of human eRF1. BMRB deposit accession number 6763.

References: Kisselev et al. (2003) *EMBO J.*, **22**, 175–182; Song et al. (2000) *Cell*, **100**, 311–321

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