

Letter to the Editor

NMR assignment of a human cancer-related nucleoside triphosphatase

DOI 10.1007/s10858-006-9042-9

Identification of genes exhibiting variant expression in known cancer cell lines is one of the approaches used to provide novel insight to cancer pathways (Loging et al., 2000). Here, we thus identified the nucleoside triphosphatase HCR-NTPase as the 20.5 kDa gene product 32324 (Strausberg et al., 2002) in a screen of the CGAP database (<http://www.cgap.nci.nih.gov>). As the first step toward a three-dimensional structure determination, NMR assignments for the uniformly ^{13}C , ^{15}N -labeled HCR-NTPase in complex with ATP γ S were determined, using 2D and 3D heteronuclear NMR experiments measured at ^1H frequencies of 600 MHz and 800 MHz. 93% of all expected resonances have been assigned. Missing assignments are for the backbone atoms ^{15}N and H^{N} of R2, T37, G43, G44, G78, Q79, S101, S102, E113, I114, M117, G148, L153 and S187, for which no peaks were observed in the 2D [^{15}N , ^1H]-HSQC spectra, all side chain atoms of A1, P9, S101, E113, K116 and S187, γCH_2 and δCH_2 of R63, R129, R173 and R188, δCH_2 of R158 and P178, and ϵCH of H3, H19 and H175.

BMRB deposit: Accession No. 7119. (Support: Skaggs Training Grant; Pew Latin American Fellows Program).

References: Loging et al. (2000) *Genome Res.*, **10**, 1393–1402; Strausberg et al. (2002) *Proc. Nat. Acad. Sci. USA*, **99**, 16899–16903.

W. J. Placzek, M. A. Almeida & K. Wüthrich*

Department of Molecular Biology, The Scripps Research Institute, La Jolla, CA 92037, USA

*To whom correspondence should be addressed. E-mail: wuthrich@scripps.edu