

Letter to Editor

NMR assignment of the chitin-binding domain of a hyperthermophilic chitinase from *Pyrococcus furiosus*

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Chitinases [EC 3.2.1.14] catalyze the hydrolysis of the β -1,4 linkage between *N*-acetyl-D-glucosamine moieties in chitin. In contrast to bacterial, fungal, and plant chitinases, the structures of only a few archaeal chitinases have been reported (Tanaka et al., 1999). We have found a chitinase from a hyperthermophilic archaeon, *Pyrococcus furiosus*, (homologous to a chitinase of *Thermococcus kodakaraensis*), which has dual active domains and dual substrate binding domains (Oku and Ishikawa, 2006). Here we report the NMR resonance assignment of one of the chitin binding domains (ChBD2) of the chitinase. This domain comprises 101 amino acids and is likely to belong to CBM family II according to its amino acid sequence. Multidimensional NMR experiments were performed to obtain the complete sequence specific backbone resonance assignments using uniformly ^{13}C , ^{15}N -labeled ChBD2. Aliphatic side chain resonances were also completely assigned. BMRB deposit: accession number 6829.

References: Oku and Ishikawa (2006) *Biosci. Biotechnol. Biochem.*, **70**, 1696–1701; Tanaka et al. (1999) *Appl. Environ. Microbiol.*, **65**, 5338–5344.

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