

Letter to the Editor

NMR assignments of the free and bound-state protein components of an anti-idiotypic affibody complex

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Affibodies are engineered binding proteins based on the 58-residue Z domain. It was recently shown that one can obtain affibody pairs with anti-idiotypic binding behaviour (Eklund et al., 2002). One such example is the complex between the Z_{Taq} and anti- Z_{Taq} affibodies. Here we report complete ^1H , ^{15}N , ^{13}C assignments of the 1:1 Z_{Taq} :anti- Z_{Taq} complex and also of the two affibodies in the free state. There are only a few cases in the literature in which the structures of a protein–protein complex and the free subunits have been determined under identical experimental conditions. The structures of the present affibodies in their free and complexed states should therefore be valuable for understanding the mechanisms that regulate binding affinity and specificity, and in particular to address the role of induced fit of surface side chains in molecular recognition. Overall, 99% of all aliphatic, aromatic and backbone protons were assigned. BMRB Accession Nos. are 6804 (Z_{Taq}) 6805 (anti- Z_{Taq}), and 6806 (Z_{Taq} :anti- Z_{Taq} complex).

Reference: Eklund et al. (2002) *Proteins*, **48**, 454–462.

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