

Letters to the Editor

Resonance assignments of 30 kDa complexes of TFIID subunit TAF1 with TATA-binding protein

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The TAF N-terminal domain (TAND) of TAF1 directly interacts with TBP and modulates the interaction of TBP with TATA box. We previously reported the solution structure of yeast TBP (yTBP, residues 49–240) in complex with *Drosophila* TAF1 (dTAND1, residues 11–77) where dTAND1 occupies TATA binding concave surface of TBP thereby inhibiting the DNA-binding activity of TBP. In yeast yTAND1 (residues 10–37) is much shorter in length than its counter part in dTAND1, and requires TAND2 (residues 46–71) to form a stable complex with TBP. The structure of TBP-yTAND1-2 complex is yet to be determined. We report backbone ^1H , ^{13}C and ^{15}N chemical shifts of TBP-yTAND1-2 and TBP-dTAND1 complexes (~30 kDa each). The chemical shift information reported here will provide a platform for studying protein–protein interactions with TBP involved in transcription. BMRB deposit accession numbers 6700 and 6702.

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^1H , ^{15}N and ^{13}C resonance assignments of the Domain III of the Dengue Virus Envelope Protein

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The domain III of the dengue virus envelope protein (DENV-ED3) is the dominant antigen in eliciting neutralizing antibodies and plays an important role in inducing immunologic responses (Burke and Monath, 2001). In order to provide the structural basis for immunologic protection and for vaccine design effective against DENV, here we report the ^1H , ^{15}N and ^{13}C resonance assignments of the 109 residue DENV-ED3. 2D and 3D heteronuclear NMR experiments were performed with uniformly ^{15}N -, ^{13}C -labeled DENV-ED3. About 96% of the backbone and 91% of the side-chain ^1H , ^{13}C , and ^{15}N resonance assignments were obtained with the exception of S297, Q315, I338, K343, V346, G348, and K393. K343, V346, and G348 are in the flexible loop region whereas K393 is in the terminus. Analysis of C_α , C_β , NH and H_x chemical shifts has established that the secondary structure of DENV-ED3 is consistent with previously reported structure of JEV-ED3 (Wu et al., 2003). BMRB deposits with accession number 6725.

References: Burke and Monath (2001) *Fields Virology*, 4th edn., pp. 1043–1125; Wu et al. (2003) *J. Biol. Chem.*, **278**, 46007–46013.

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