Structural polymorphism and substrate promiscuity of a ribosome-associated molecular chaperone

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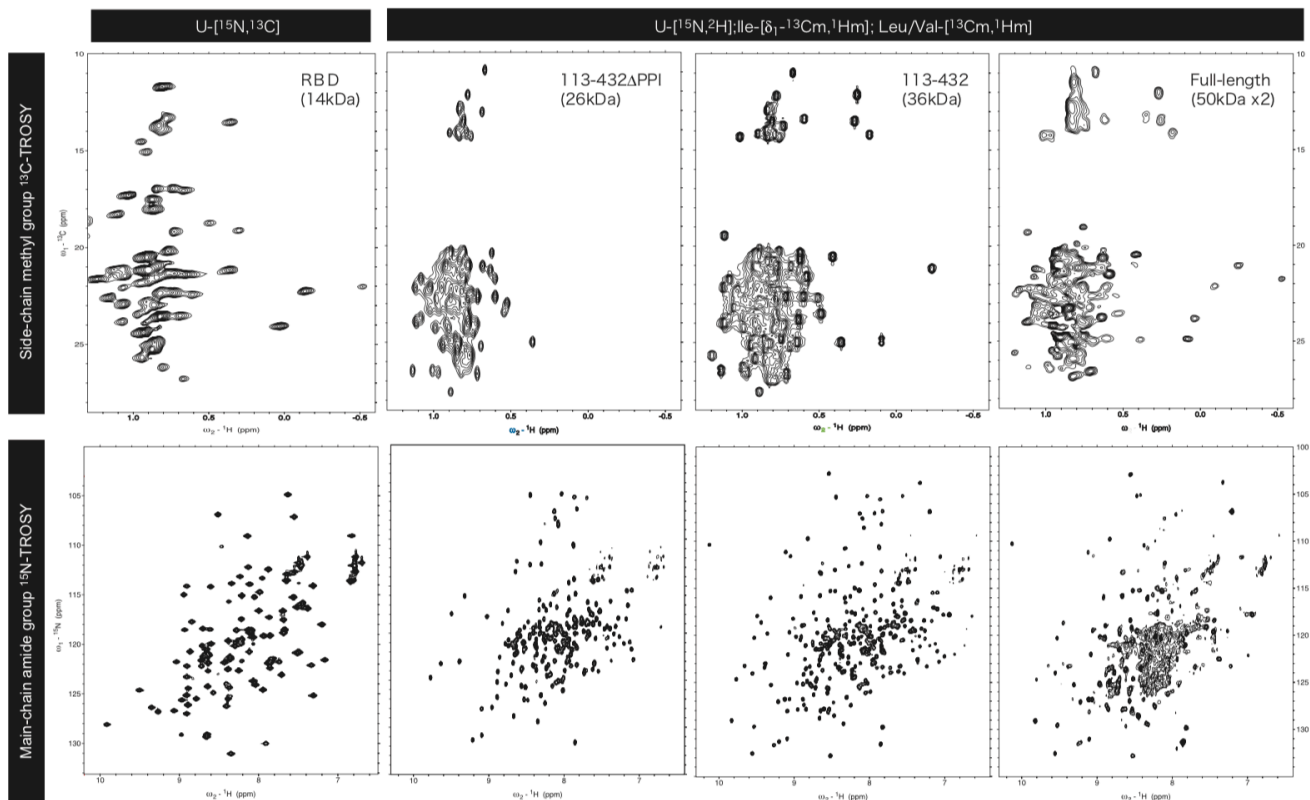
Figure S1. Divide-and-conquer strategy for NMR assignments of TF. The side-chain methyl ^{13}C-^1H correlation spectra are shown on the top panels. The backbone amide ^{15}N-^1H correlation spectra are shown on the bottom panels. Except for RBD, which was not deuterated and selectively methyl-labeled, all other constructs, namely SBD (113-432ΔPPI), TF113-432 and full-length TF were perdeuterated and selectively protonated and ^{13}C labeled in the methyl groups of isoleucine δ1, leucine, and valine.
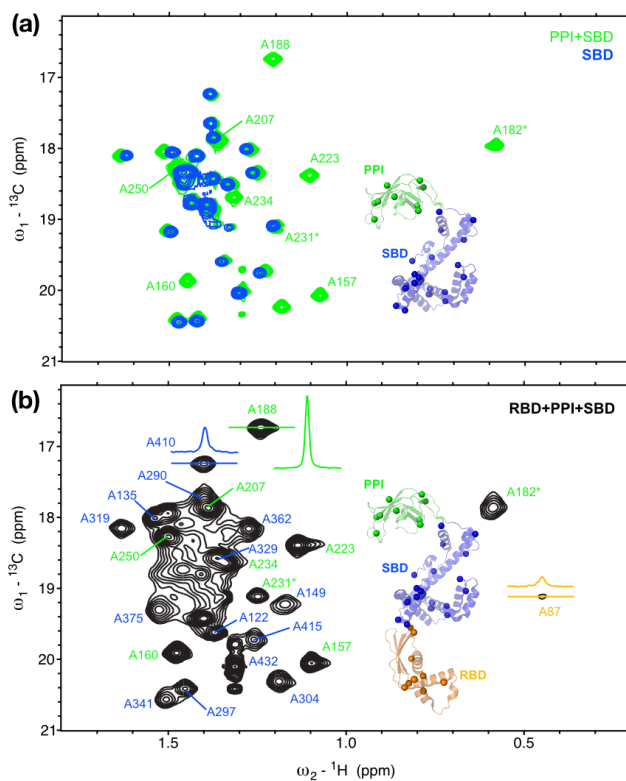
Figure S2. Alanine methyl NMR spectral analyses of TF variants. (a) Superposition of the methyl ^{13}C-^1H correlation spectra of SBD (blue) and TF$_{113-432}$ (green) with selected crosspeaks originated from PPI labeled with their residue identities. (b) Methyl ^{13}C-^1H correlation spectra of full-length TF with resolved crosspeaks labeled with the corresponding residue identities. The proton lineshapes of selected resonances are shown for RBD, PPI and SBD as indicated by the horizontal lines. Insets: cartoon representations of TF$_{113-432}$ (a) and full-length TF (b) with RBD, PPI and SBD colored in orange, green and blue, respectively. The Cβ atoms of the selectively protonated and ^{13}C labeled alanine side-chains are shown in spheres. All constructs were perdeuterated with selective protonation and ^{13}C labeling at the alanine Cβ positions.