

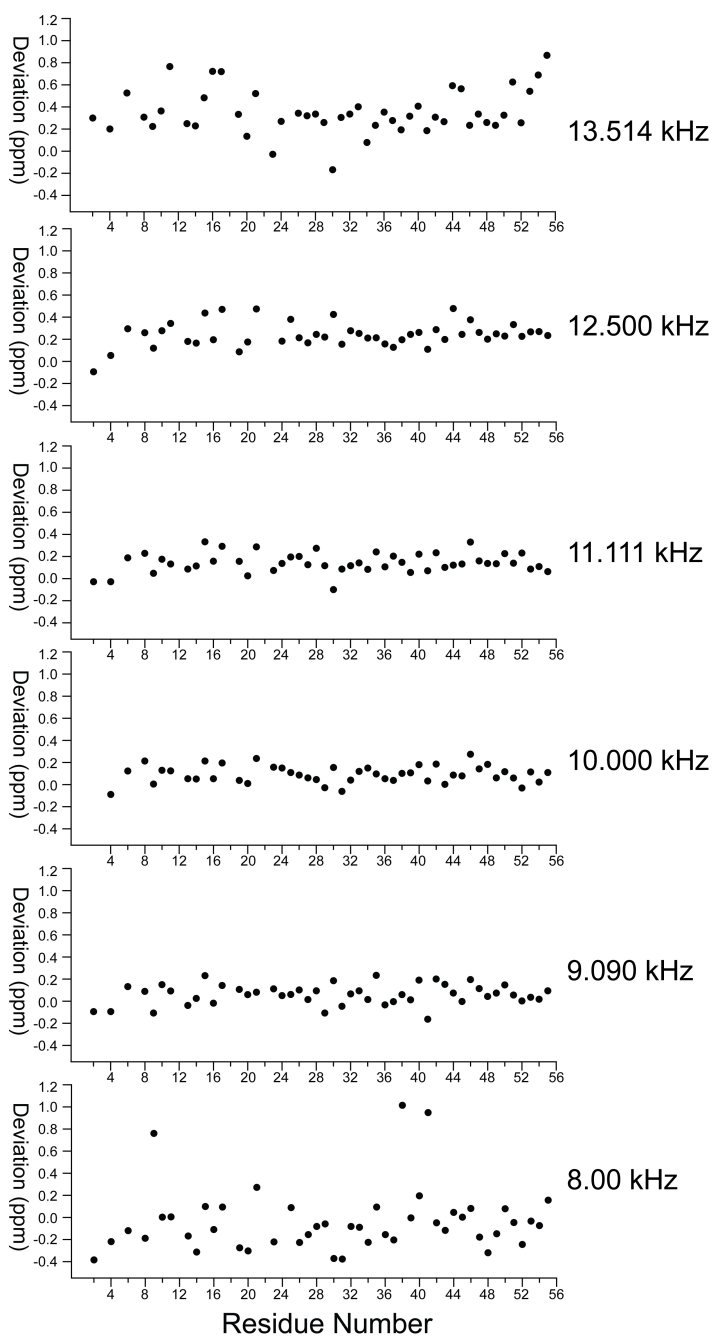
Isotropic Chemical Shifts in Magic-Angle Spinning NMR Spectra of Proteins

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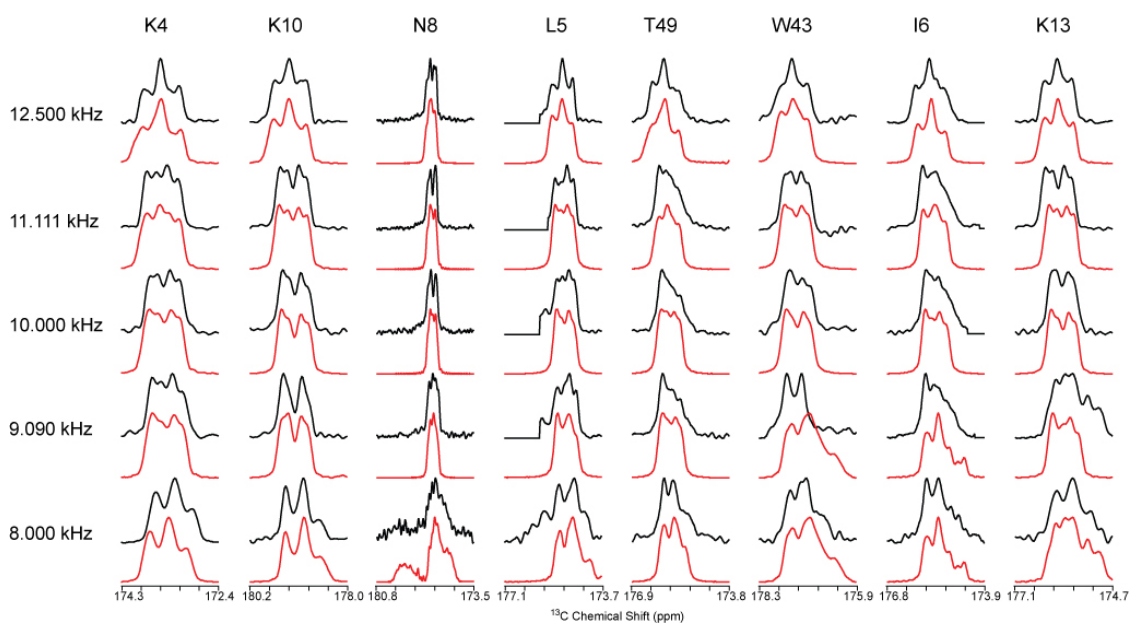
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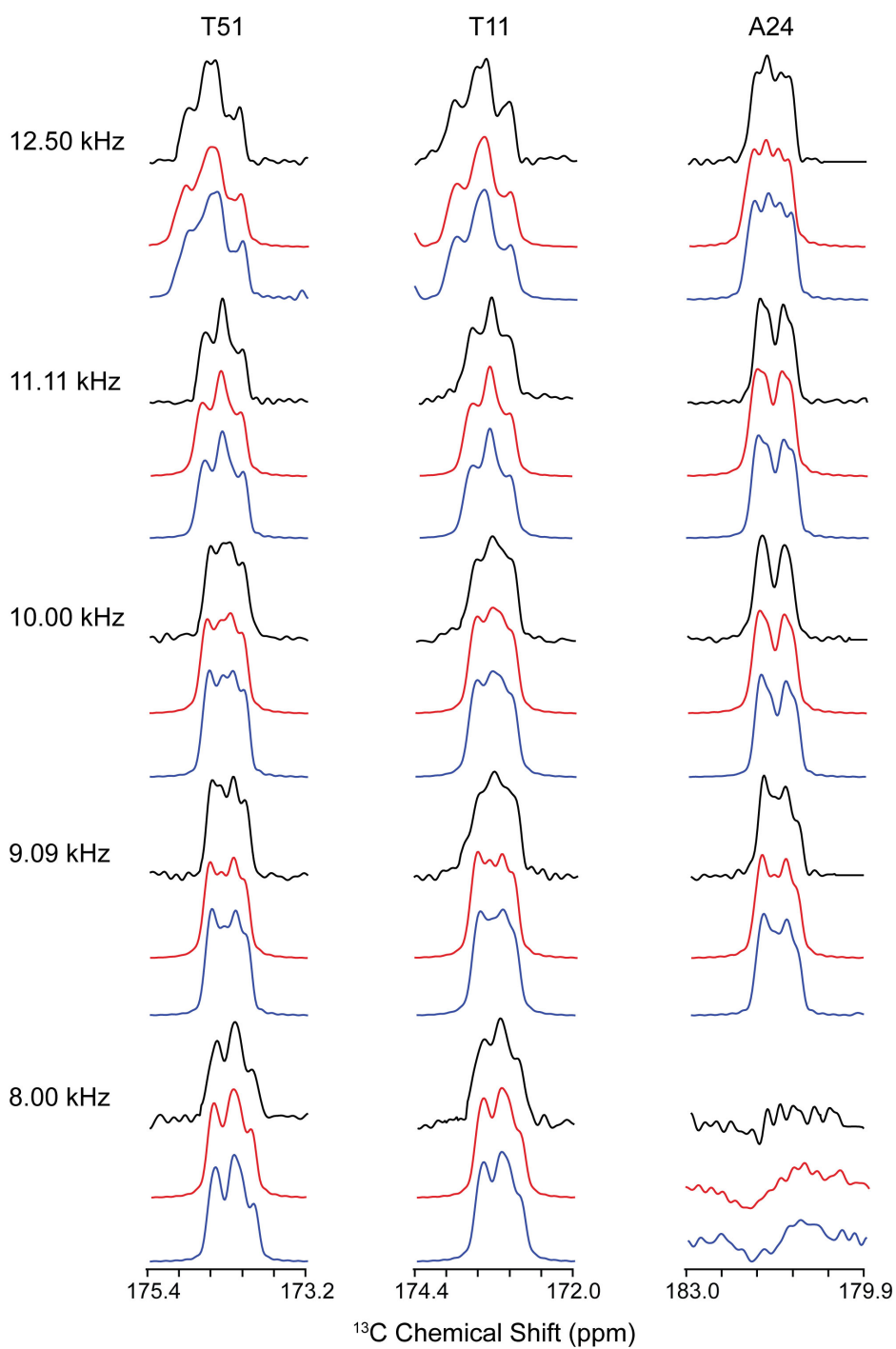
Supporting Information



Supporting Figure 1. Residue-specific deviations of measured ^{13}C isotropic chemical shifts in GB1. The deviation is defined as the difference of observed peak position measured in the $\text{U-}^{13}\text{C}$ -labeled sample from the position measured in the sample prepared from 1,3- ^{13}C -glycerol. Experiments were performed at 500 MHz ^1H frequency, with further details included in the main text.



Supporting Figure 2. Exemplary experimental lineshapes (black) and best fit simulations (red) for carbonyl signals in U- ^{13}C , ^{15}N -labeled GB1. Experiments were performed at 500 MHz ^1H frequency.



Supporting Figure 3. Examples of experimental lineshapes (black) and best fit 2-spin simulations (red), and best fit 4-spin simulations (blue). Differences between 2-spin and 4-spin simulations within the experimental relaxation and SNR are minimal.