

Detection of Correlated Conformational Fluctuations in Intrinsically Disordered Proteins through Paramagnetic Relaxation Interference

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- Supporting Information -

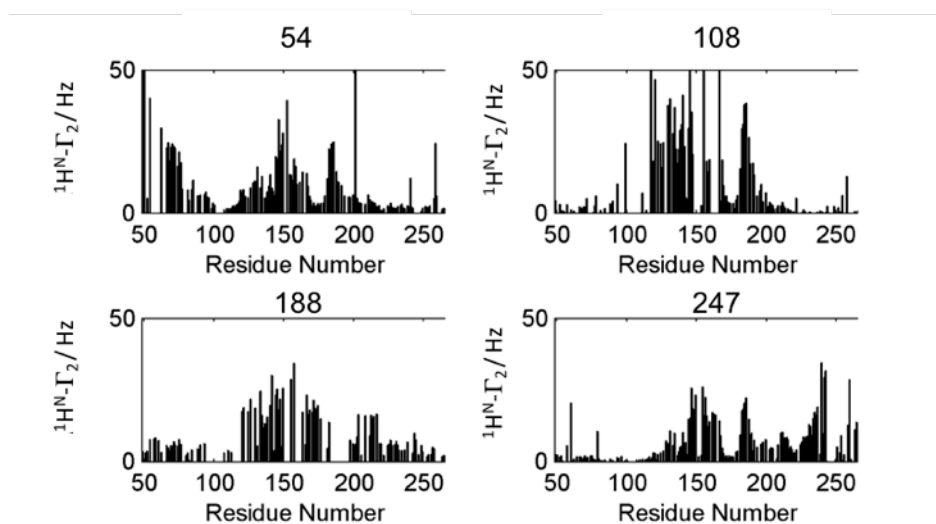


Figure S1. PRE residue plots for the four OPN single mutants as indicated on top of each panel.

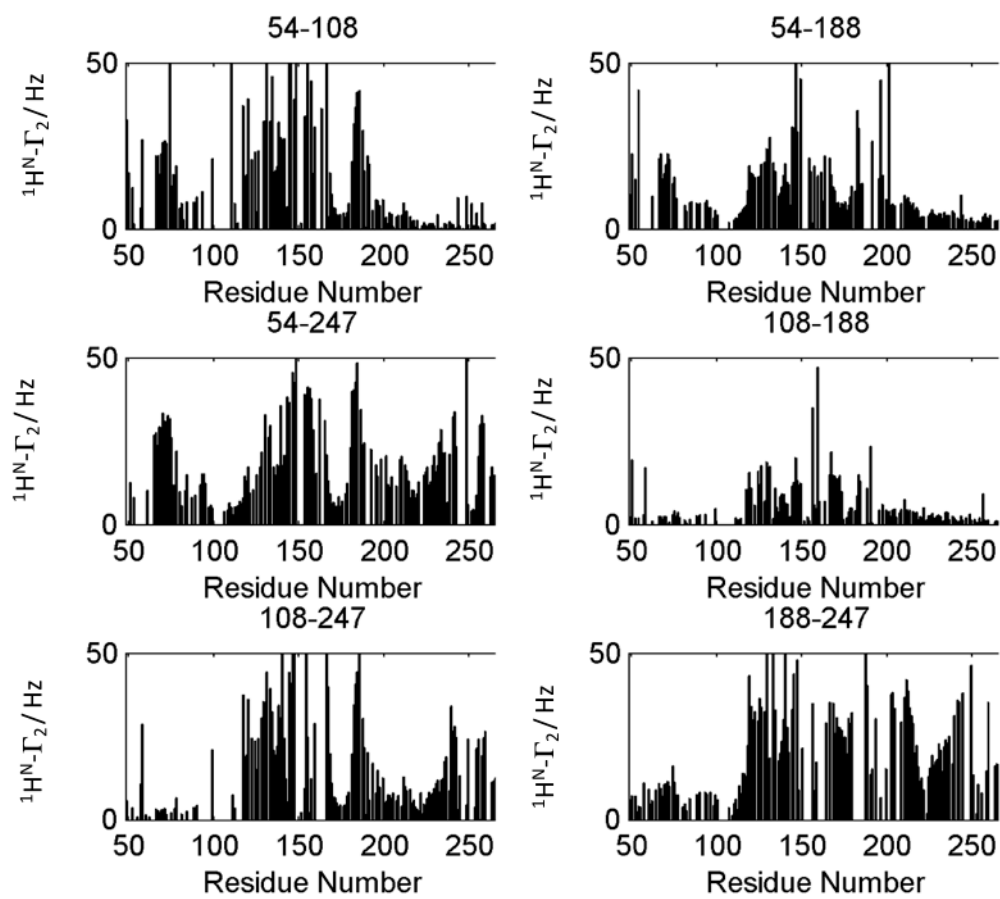


Figure S2. PRE residue plots for the six OPN double mutants as indicated on top of each panel.

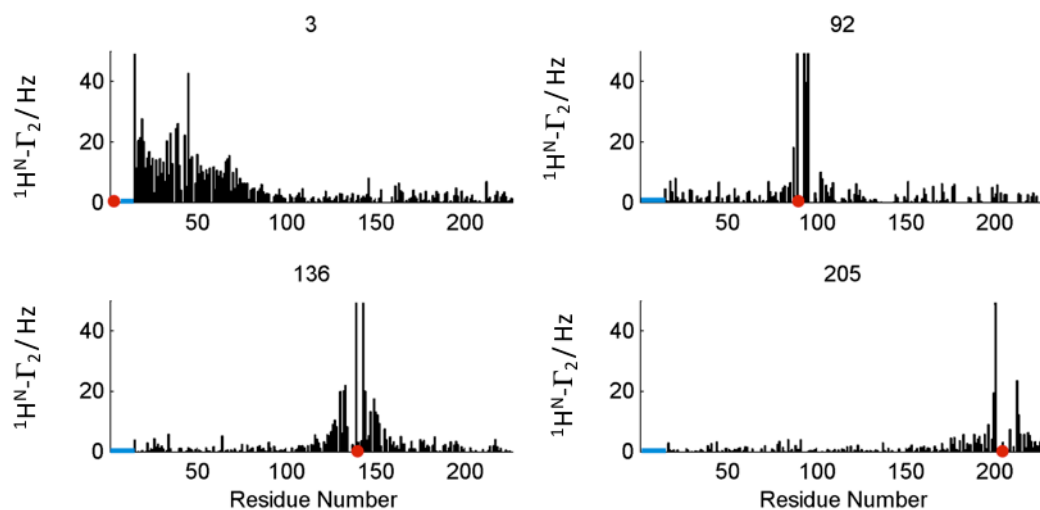


Figure S3. PRE residue plots for the four BASP single mutants as indicated on top of each panel.

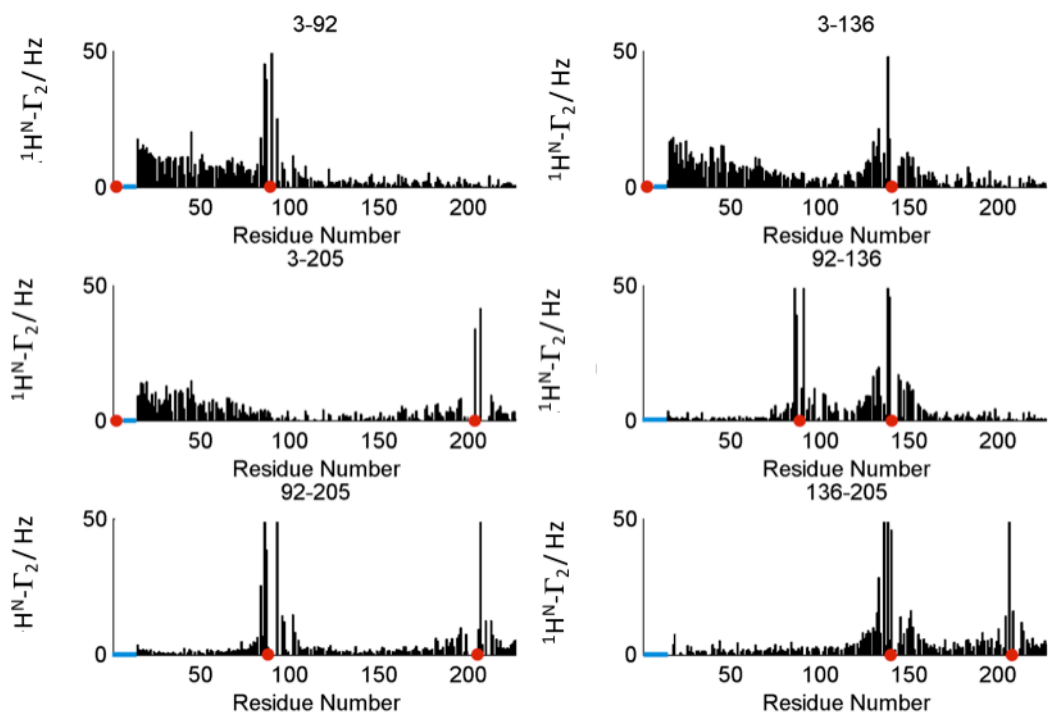


Figure S4. PRE residue plots for the six BASP double mutants as indicated on top of each panel.

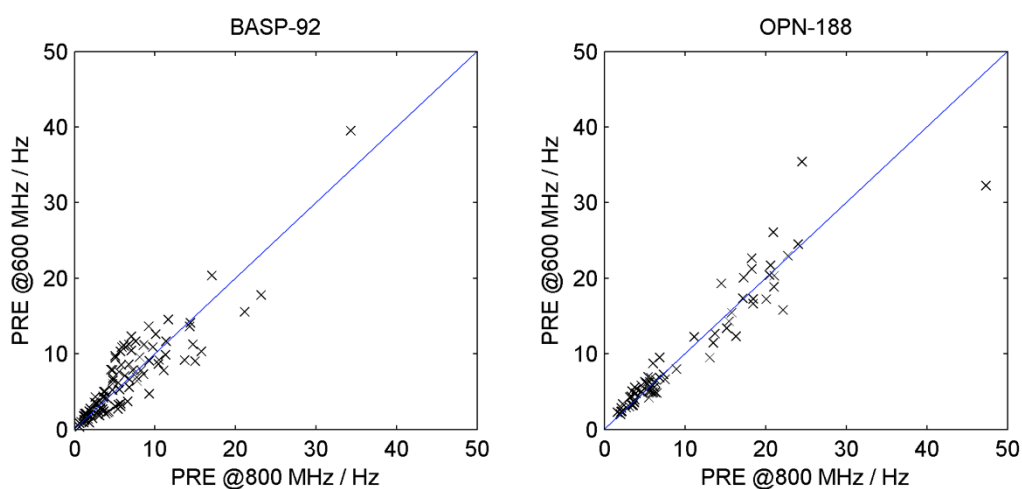


Figure S5. Comparison of PREs gained at different field strength (600 and 800 MHz) for BASP-C92 and OPN C-188. The correlation is good indicating that Curie-spin relaxation effects can be neglected for the present study.

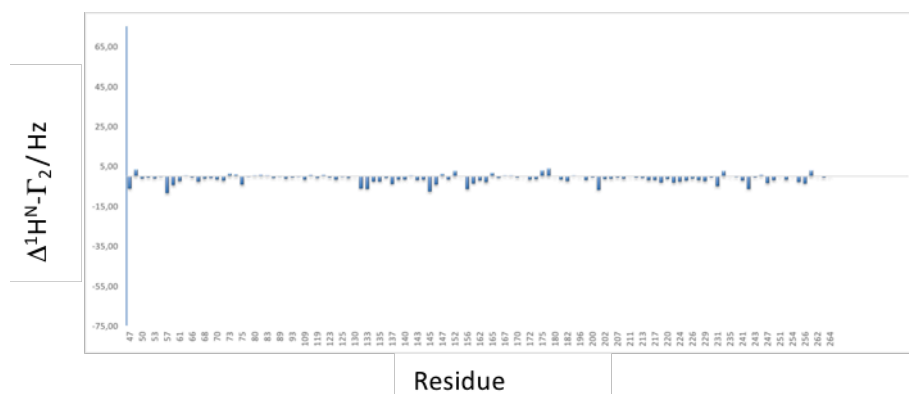


Figure S6. Example of intermolecular $\Delta^{1}\text{H}^{\text{N}}-\Gamma_{2}$ for the mutant system OPN C54-C247. Clearly intermolecular effects can be out ruled.

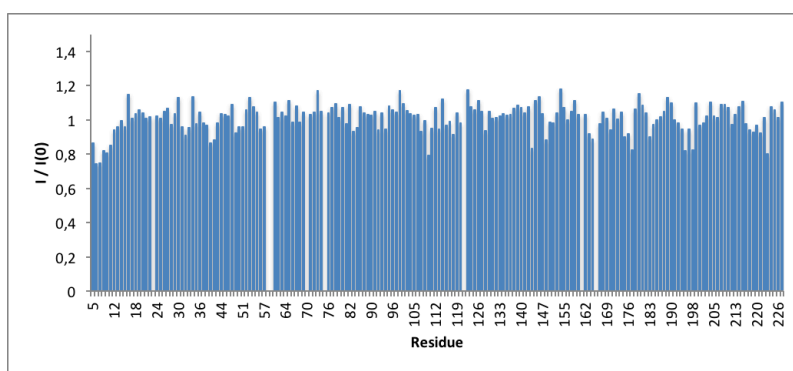
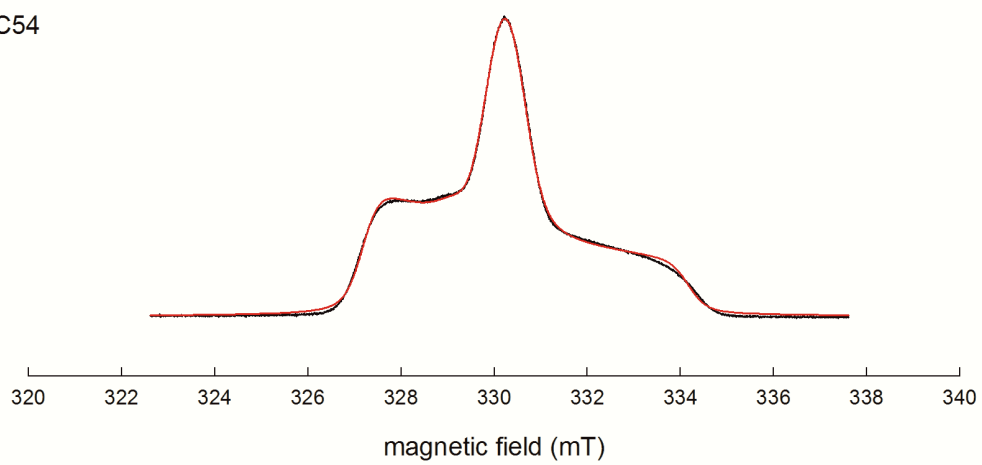
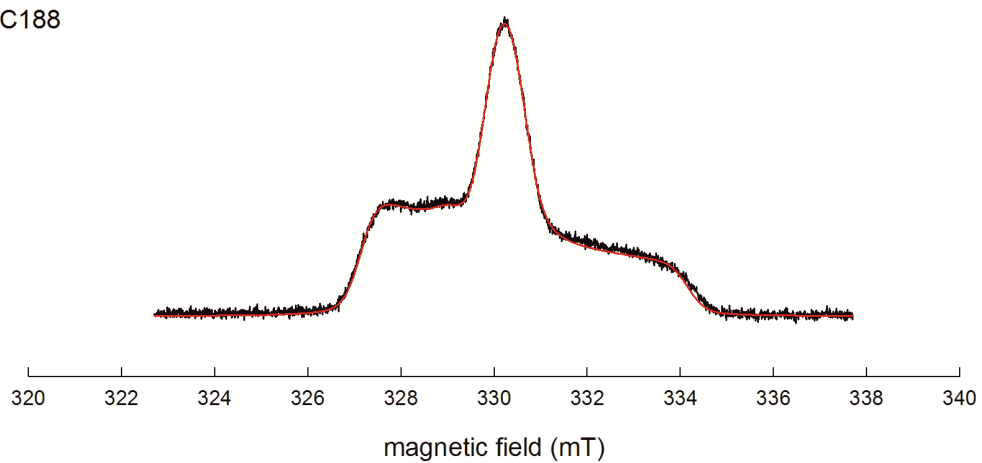


Figure S7 Control experiment of intermolecular PREs (changes in $^1\text{H}-^{15}\text{N}$ HSQC crosspeak intensities) for the mutant system ^{15}N -BASP1 + ^{14}N -BASP-N14. Weak intermolecular effects were observed for residues 5-15. These were consequently excluded from our study.

C54



C188



C54-C188

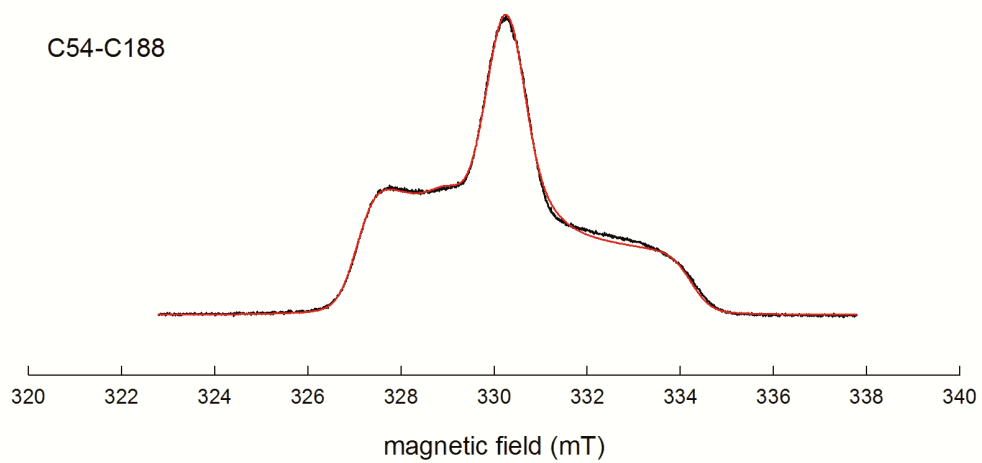


Figure S8. ESE detected spectra (absorption mode) of single mutants C54 and C188 and of double mutant C54-C188. Experimentally obtained spectra are presented as black line and corresponding simulations as red line.