

¹⁵N HSQC temperature titration of the intrinsically disordered protein FITZAP, 295-310 K, 200 uM, 50mM NaCl/10 mM Tris, pH 7.4/7% D₂O

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Field strength: 800 MHz

Why is this your favorite spectrum?

This intrinsically disordered protein is 36 residues in length, yet exists within two slowly exchanging forms driven in large part by H-bonding of the A27 backbone amide (as observed by the shift in upfield ¹H, downfield ¹⁵N, and reduced CSP within the temperature titration). This spectrum highlights the complexity of chemical biology that can be observed and described within even "disordered" systems.