

NMR measurement time usage on the 700 MHz instrument

Characterization of small molecules and proteins under physiological conditions

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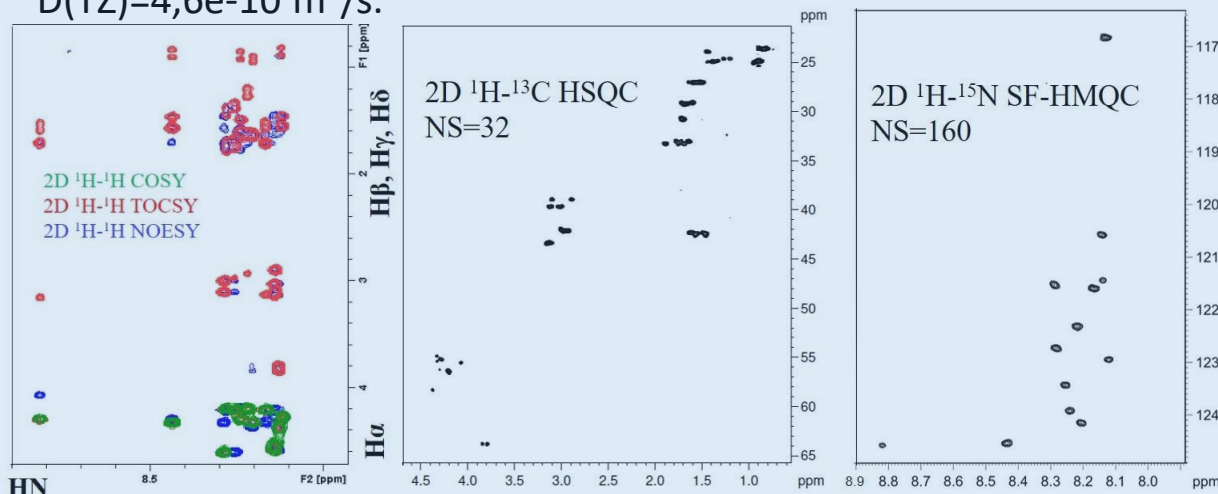
TTK, Institute of Enzymology, Intrinsically disordered proteins research group

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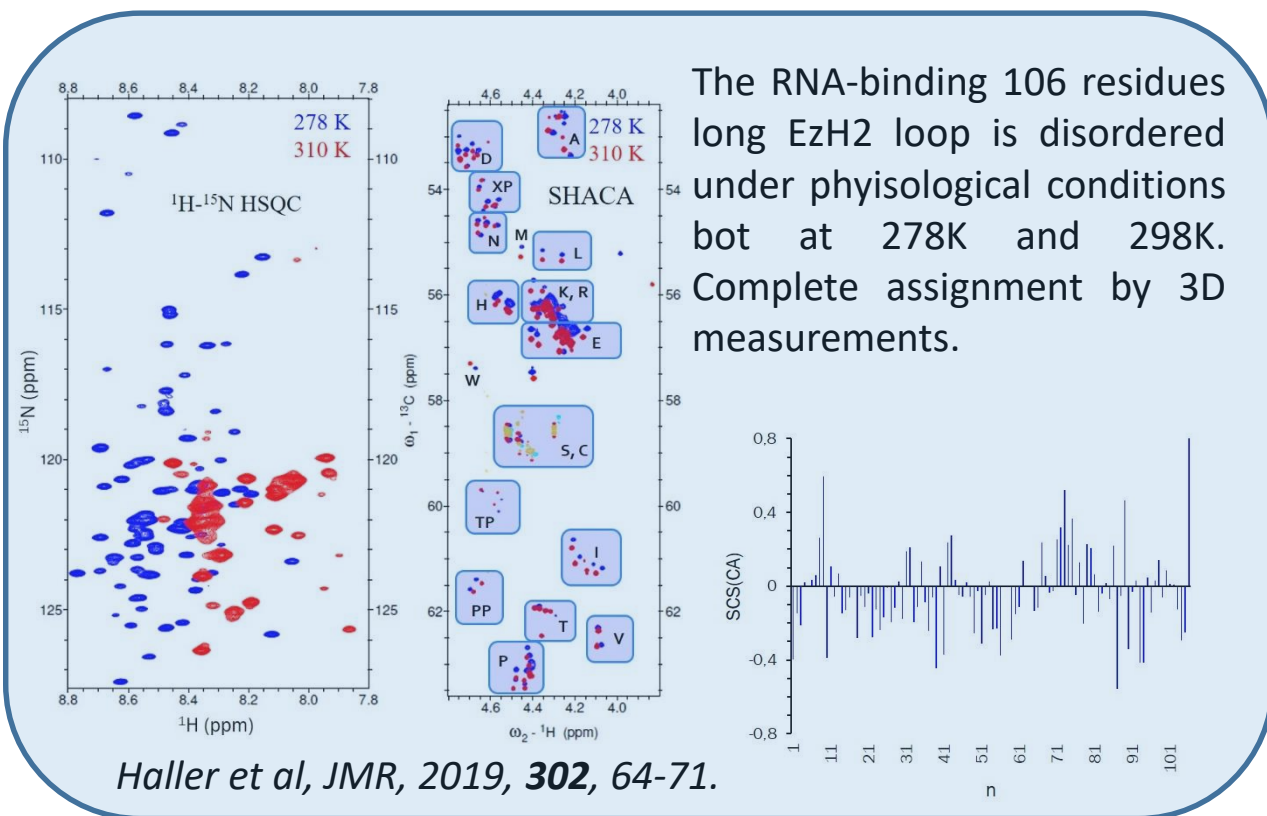
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Investigation of the interaction between the histidine derivative DHVAR4 peptide and food color tartrazine (TZ) at natural isotope distribution by 2D homo- and heteronuclear as well as translational diffusion measurements. The 1mM 14 residues long peptide is disordered. The existence of electrostatic interaction between the positive DHVAR4 and negative TZ. $D(\text{DHVAR4}) = 2,1 \times 10^{-10} \text{ m}^2/\text{s}$; $D(\text{TZ}) = 4,6 \times 10^{-10} \text{ m}^2/\text{s}$.



Ricci et al, Quarterly Reviews of Biophysics, 2020, **53**, e5, 1-11



The RNA-binding 106 residues long EzH2 loop is disordered under physiological conditions both at 278K and 298K. Complete assignment by 3D measurements.

Haller et al, JMR, 2019, **302**, 64-71.