Tata Institute of Fundamental Research
Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad – 500 046

Seminar

Solid-State NMR Chemical Shift Assignment of Nectin-3 (RREWYV) Insertion Mutant of AF6 PDZ

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PDZ domains, often found in various signalling and structural proteins, are known for their role in organising protein complexes, particularly at cellular junctions and synapses. Adherens junctions, primarily composed of Cadherins, Catenins and Nectins, facilitate cellular adhesion by linking to the actin cytoskeleton of adjacent cells. AF6-PDZ domain (PDZ domain from AF6, All1-fused gene from Chromosome 6) is a crucial component contributing to the formation and stabilisation of Adherens Junctions. Multiple mutants have been attempted to stabilise and isolate the individual monomer and dimer populations of the AF6-PDZ domain. The C-terminus Nectin peptide insertion to the AF6-PDZ has been reported earlier to give a homogeneous dimer population. As a first step at characterising the structural allostery associated with PDZ-PDZ interactions, we report the solid-state NMR chemical shift assignments of the Nectin-insertion mutant of AF6-PDZ (PDZ-IN mutant).

Friday, Aug 23rd 2024

11:30 Hrs (Tea / Coffee 11:15 Hrs)

Auditorium, TIFR-H