Tata Institute of Fundamental Research
Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad - 500107

Students' Annual Seminar

Expression and purification of mitochondrial pyruvate carrier (MPC)

Pravin Pralhad Taware

Active transporters are the transmembrane proteins which allow specific molecules to move against their concentration gradients across membranes. In spite of a large body of research, several basic questions about the mechanism by which these proteins function remain unanswered. We intend to answer these questions by studying the transport of pyruvate through mitochondrial pyruvate carrier (MPC), which is an ideal system to do this due its small size and biological importance. In order to do this, we will use solid and solution state NMR spectroscopy. With the final aim of preparing ^{13}C and ^{15}N labelled proteins, we cloned the components of yeast and human MPC into the suitable vectors for heterologous expression in bacterial systems. I will report on different strategies we have used for expression of these proteins, and their purification.

Friday, Mar 1st 2019

11:00 AM (Tea/Coffee at 9:45 AM)

Seminar Hall, TIFR-H