

Protein Engineering (15 days)

Module Content
Preparation of Molecular-grade solutions
Cell Lysis and protein isolation
Protein precipitation by acetone and ammonium sulphate
Quantitative protein estimation by Folin Lowry Method
Crude sample preparation for SDS-PAGE
SDS-PAGE analysis
Gel permeation chromatography
Introduction to Protein Databases
Protein Alignment

Protein Engineering (30 days)

Module Content
Preparation of Molecular-grade solutions
Cell Lysis and protein isolation
Protein precipitation by acetone and ammonium sulphate
Qualitative protein estimation by Bradford Assay
Quantitative protein estimation by Folin Lowry Method
Crude sample preparation for SDS-PAGE

SDS-PAGE analysis
Gel permeation chromatography
Affinity chromatography
Ion Exchange chromatography
Western Blotting
Introduction to Protein Databases
Protein Alignment
Protein structure prediction
Protein structure validation