Characterization of protein-protein interactions by ITC (isothermal

titration calorimetry) measurements

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Duration 2-3 Days

Number of Participants: 2-4

With ITC it is possible to define the thermodynamic parameters of an interaction during one

single experiment.

By measuring the generated or absorbed heat of a biomolecular reaction the association

constant (kA), the stoichiometry of the reaction (N) and the change of entropy (DS) and

enthalpy (ΔH) is determined. At the first day the participants will be introduced to the

theoretical principals of ITC and get familiar with the fully automated AutoITC 200.

At the second day the participants have the opportunity to do first measurements with their

own protein samples. The third day is blocked for analysis of the data and trouble shooting.

The introduction of this method will take two or three days.

1. Day: theoretical aspects of ITC

Measurements of prepared examples

2.-3. Day:

Measurements of individual prepared examples.

Evaluation and interpretation of the results