

Partitioning of Proteins in Aqueous Two Phase System

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Aqueous two phase extraction (ATPE) is a biocompatible, non-organic and highly selective method in separation. With these advantages, it is widely used in the separation of cells and macromolecules: nucleic acids, antigen-antibody complexes and proteins. We observed different partitionings of proteins in aqueous two phase system by changing concentrations of polyethylene glycol (PEG). We applied various aqueous two phase systems -PEG/salt- to the protein mixture. By changing salt, pH and PEG concentration in aqueous two phase system, we selectively separated the target protein from the mixtures.