

Mind Map Protein Purification Assignment

A mind map, also called a concept map, is a way to visually connect important terms and ideas. A concept map is a visual organization and representation of knowledge. It shows concepts and ideas and the relationships among them. You create a concept map by writing key words (sometimes enclosed in shapes such as circles, boxes, triangles, etc.) and then drawing arrows between the ideas that are related. Then you add a short explanation by the arrow to explain how the concepts are related. To see example of a concept or mind map, do a quick google search and click on images to see how they can be created.

Below are a series of terms and short phrases that you should become familiar with and make a mind map. You can talk with others about this, using zoom or whatever means you find appropriate and then each student must create his or her own mind map using the terms below. IF in the process you find more terms or ideas or short phrases, that you feel critical to understand the techniques of protein purification feel free to add.

THIS IS AN INDIVIDUAL ASSIGNMENT - Grading will be done by the completeness and the short (emphasize short) explanation for the arrows. Create your mind map by hand, take a pic and convert to a PDF (a scan function on your phone works best).

Affinity chromatography

2X His Tag

Epitope Tag

Flag Tag

Metal Chelate Affinity Chromatography

Glutathione S Transferase

GST Tag Protein

GFP fusion protein

Size Exclusion Chromatography

Inclusion Range (SEC)

Exclusion Range (SEC)

TEV Protease

Thrombin

Elisa

Westernblot

Epitope tag

Ion Exchange Chromatography

Carboxymethyl

DEAE

Ligand

Immunoblot

Primary antibody

immunoprecipitation

SDS PAGE

Detergent

Expression