

Principles and Reactions of Protein Extraction, Purification, and Characterization; 2017; 9780203507438; Hafiz Ahmed, Hafiz Ahmed PhD; CRC Press, 2017; 408 pages

Protein extraction improved with recoveries ranging from 10.27% in 225 g BSFL to 17.16% in 8 g BSFL, which is more in the range of the approximately 20% found for the other insect species Yellow mealworm, Superworm, Lesser mealworm, House cricket and Dubia cockroach. 16 This difference might be caused by the complexity involved in extracting proteins out of the insects; the hydrophobicity of proteins, which are not easily soluble in aqueous buffer systems and remain bound to the solid cellular material; or that different organelles (e.g., mitochondria, lysosomes, endoplasmic reticulum) remain. The author presents the principles and reactions behind each procedure and uses tables to compare the different methods. The illustrations, diagrams, and tables effectively transform theoretical concepts into practical knowledge. Principles and Reactions of Protein Extraction, Purification, and Characterization provides the mechanisms and experimental procedures for classic to cutting-edge techniques used in protein extraction, purification, and characterization. Presenting the advantages and disadvantages of the various protein techniques, this book enables students and researchers to master the mechanisms behind the protocols and choose the best method for their purposes. Table of contents. Chapter 1: Extraction of Protein. Protein Expression and Purification is an international journal providing a forum for the dissemination of new information on protein expression, extraction, purification, characterization, and/or applications using conventional biochemical and/or modern molecular biological approaches and methods, which... Protein Expression and Purification is an international journal providing a forum for the dissemination of new information on protein expression, extraction, purification, characterization, and/or applications using conventional biochemical and/or modern molecular biological approaches and methods, which are of broad interest to the field.