Methods in ENZYMOLOGY

Volume 400

Phase II Conjugation Enzymes and Transport Systems

Edited by

Helmut Sies

Lester Packer

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PHASE II CONJUGATION ENZYMES AND TRANSPORT SYSTEMS

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Preface

This volume on conjugation enzymes and transporters serves to bring together current methods and concepts in an interesting, important, and rapidly developing field of cell and systems biology. It focuses on the so-called Phase II enzymes of drug metabolism (xenobiotics), which have important ramifications for endogenous metabolism and nutrition. Also included are aspects on Phase III, transport systems. This volume of *Methods in Enzymology* presents current knowledge and methodology on glucuronidation, sulfation, acetylation, and transport systems in this field of research. Together with the volumes on ***Quinones and Quinone Enzymes (volumes 378 and 382)*** and ***Glutathione Transferases and gamma-Glutamyl Transpeptidases (volume 401)***, the state of knowledge on proteomics and metabolomics of many pathways of (waste) product elimination, enzyme protein induction and gene regulation and feedback control is provided. We trust that this volume will help stimulate future investigations and speed the advance of knowledge in systems biology.

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