

Methods in Enzymology

Volume 197
PHOSPHOLIPASES

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Phospholipases

EDITED BY

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Preface

Until recently, lipids were thought to play important roles in only energy storage and membrane structure. It is now clear that they also play many other critical roles, especially as mediators in cell activation and signal transduction. The phospholipases are key enzymes in all of these functions. Recent advances in enzymology and molecular biology have given us new tools to study how various phospholipases function and their importance in regulation and metabolism.

A few chapters on phospholipases have been included in the *Lipids* and *Biomembranes* volumes of this series. We are indeed pleased that the central role and importance of phospholipases has now been recognized and that an entire *Methods in Enzymology* volume is devoted to this subject.

In this volume, the term phospholipases has been broadly interpreted to include not only those enzymes traditionally defined as phospholipase A₁, A₂, C, D, and lysophospholipase, but also other enzymes which break down phospholipids, including sphingolipids, such as sphingomyelinase, lecithin-cholesterol acyltransferase (LCAT), platelet activating factor (PAF) acetyl hydrolase, lysoplasmalogenase, and some lipases. Chapter 1 more completely defines the phospholipase substrates and provides an overview to the special problems involved in the assay and study of the phospholipases.

We appreciate the authors' cooperation in promptly preparing manuscripts. We also thank the staff of Academic Press for their help in producing a timely volume in this important field. The counsel of Drs. Laure Reynolds and Raymond Deems is much appreciated. Special thanks go to Lynn Krebs whose secretarial assistance aided immeasurably in the compilation of this volume.

EDWARD A. DENNIS

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