

Glycerophospholipids in Brain

Phospholipases A₂ in Neurological Disorders

Akhlaq A. Farooqui • Lloyd A. Horrocks

in a scattered number of original papers and reviews. Here, the research of over 25 years is collected in one volume from two of the leading researchers in the field—Akhlaq A. Farooqui and Lloyd A. Horrocks

Glycerophospholipids in Brain: Phospholipases A₂ in Neurological Disorders comprehensively describes:

- metabolism in brain of glycerophospholipids, including those containing a vinyl ether group (plasmalogens)
- cutting-edge information on the properties and roles of phospholipases A₂ in the central nervous system
- release by phospholipases A₂ of second messengers (arachidonic acid, docosahexaenoic acid, and lysophospholipid) from neural membrane phospholipids and their neurochemical effects on brain metabolism and function
- involvement of phospholipases A₂ in neurological and neuropsychiatric disorders, and the use of phospholipase A₂ inhibitors for the treatment of diseases associated with altered phospholipid metabolism
- methods for the assays of phospholipases A₂ and their clinical significance

This unique volume will be invaluable not only to those interested in biochemical properties of phospholipases A₂, but also their involvement in neurological disorders. Students will benefit from it as a supplement for a range of neuroscience courses. Clinicians will find it invaluable as well for understanding molecular aspects of neurodegeneration in acute neural trauma (stroke) and neurodegenerative diseases (Alzheimer disease) that are mediated by phospholipases A₂.

The information in *Glycerophospholipids in Brain: Phospholipases A₂ in Neurological Disorders* is presented in a lively manner that has never been attempted until now in this specialized format. It will be the essential text for the authoritative research in the field.

ABOUT THE AUTHORS

Akhlaq A. Farooqui and Lloyd A. Horrocks are leaders in the fields of phospholipid metabolism and phospholipases A₂ in brain. They have published cutting edge research on phospholipases A₂ and their involvement in neurological disorders in brain tissue. In collaboration with Dr. Yutaka Hirashima, they have discovered a plasmalogen-selective phospholipase A₂ in brain. They have also studied phospho-

lipid composition of neural membranes and activities of phospholipases A₂ in neural membranes. Lloyd A. Horrocks is the founding editor of *Molecular and Chemical Neuropathology* and has edited seven books.

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