Life Science

# Polyamines in Fungi

## Their Distribution, Metabolism, and Role in Cell Differentiation and Morphogenesis

It was not until recent years that the study of polyamines, their mechanisms of synthesis, and the roles they play in metabolism have flourished, becoming a fertile field of intense research. **Polyamines in Fungi: Their Distribution, Metabolism, and Role in Cell Differentiation and Morphogenesis** provides a complete overview of its topic. It is the first and only book to describe and analyze the roles of polyamines in fungi and compare them with the roles of polyamines in higher eukaryotes.

The book contains data on the distribution of polyamines, their physiological functions, mechanism of synthesis and regulation, phylogenetic analyses of the enzymes involved in their synthesis, their use as possible targets for the control of fungal diseases, and possible biotechnological and medical applications.

Based on work generated by the authors in their laboratory over many years, the book contains all the basic information to understand the similarities and differences of polyamine metabolism in eukaryotes. Additionally, it provides an up-to-date account of the contribution and potential use of fungi as models for the basic study of polyamines in comparison with other organisms.

Features:

- Provides the first comprehensive account of the various aspects of polyamines in fungi as compared to other organisms
- Contains data on polyamine distribution in the fungal kingdom in comparison to other eukaryotic groups
- Covers all aspects of polyamine metabolism and the biological function of polyamines in stress and cell integrity
- Presents phylogenetic analyses of the enzymes involved in polyamine biosynthesis

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