
Description:  Driven in part by the development of genomics, proteomics, and bioinformatics as new disciplines, there has been a tremendous resurgence of interest in physical methods to investigate macromolecular structure and function in the context of living cells. This volume in Methods in Cell Biology is devoted to biophysical techniques in vitro and their applications to cellular biology. The volume covers methods-oriented chapters on fundamental as well as cutting-edge techniques in molecular and cellular biophysics. This book is directed toward the broad audience of cell biologists, biophysicists, pharmacologists, and molecular biologists who employ classical and modern biophysical technologies or wish to expand their expertise to include such approaches. It will also interest the biomedical and biotechnology communities for biophysical characterization of drug formulations prior to FDA approval.

Describes techniques in the context of important biological problems
Delineates critical steps and potential pitfalls for each method
Includes full-color plates to illustrate techniques

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