

Micro and Nano Technologies in Bioanalysis

Methods and Protocols

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In recent years, large-scale advances in technology have led to greater understanding of the world on a much tinier scale: the biomolecular level. In *Micro and Nano Technologies in Bioanalysis: Methods and Protocols*, expert researchers from across the globe explore the technology which makes this analysis possible, investigating the worlds of microfluidics and nanotechnologies, and examining physical science techniques for the separation, detection, manipulation, and analysis of biomolecules. This volume contains innovative protocols on the application of microfluidics and the utilization of physical science-related technologies that will prove to be invaluable in the field of molecular biology. Chapters contain cutting edge applications of emerging nanotechnologies, including quantum dots and molecular fluorescence for the imaging and tracking of biomolecules. Composed in the highly successful *Methods in Molecular Biology*™ series format, each chapter contains a brief introduction, step-by-step methods, a list of necessary materials, and a Notes section which shares tips on troubleshooting and avoiding known pitfalls.

Comprehensive and groundbreaking, *Micro and Nano Technologies in Bioanalysis: Methods and Protocols* is a necessary tool for cellular biologists, biochemists, microbiologists, geneticists and medical researchers alike.

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