Handbook of LC-MS Bioanalysis. Best Practices, Experimental Protocols, and Regulations

Description: Consolidates the information LC-MS bioanalytical scientists need to analyze small molecules and macromolecules.

The field of bioanalysis has advanced rapidly, propelled by new approaches for developing bioanalytical methods, new liquid chromatographic (LC) techniques, and new mass spectrometric (MS) instruments. Moreover, there are a host of guidelines and regulations designed to ensure the quality of bioanalytical results.

Presenting the best practices, experimental protocols, and the latest understanding of regulations, this book offers a comprehensive review of LC-MS bioanalysis of small molecules and macromolecules. It not only addresses the needs of bioanalytical scientists working on routine projects, but also explores advanced and emerging technologies such as high-resolution mass spectrometry and dried blood spot microsampling.

Handbook of LC-MS Bioanalysis features contributions from an international team of leading bioanalytical scientists. Their contributions reflect a review of the latest findings, practices, and regulations as well as their own firsthand analytical laboratory experience. The book thoroughly examines:

- Fundamentals of LC-MS bioanalysis in drug discovery, drug development, and therapeutic drug monitoring
- The current understanding of regulations governing LC-MS bioanalysis
- Best practices and detailed technical instructions for LC-MS bioanalysis method development, validation, and stability assessment of analyte(s) of interest
- Experimental guidelines and protocols for quantitative LC-MS bioanalysis of challenging molecules, including pro-drugs, acyl glucuronides, N-oxides, reactive compounds, and photosensitive and autooxidative compounds

With its focus on current bioanalytical practice, Handbook of LC-MS Bioanalysis enables bioanalytical scientists to develop and validate robust LC-MS assay methods, all in compliance with current regulations and standards.

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