



REAL TIME MASS DETECTION IN YOUR BIOPROCESS

MiD® ProteinID

One box solution for mass detection

The MiD® ProteinID is the next generation of mass detector, providing real-time information about the small molecules and proteins in your bioprocessing workflows at the point-of-need. The detector is designed for multiple upstream and downstream scenarios. Using the MiD® ProteinID you can verify the health of your target protein on the fly, while simultaneously monitoring metabolite and feedstock information. This means the detector is an all in one CriticalQuality Attribute and Critical Process Parameter measurement tool.

The MiD® ProteinID benefits from unique patented chip-based technology, providing a completely toolless, one box solution for mass detection. Its compact size and reduced pump down time makes the system easy to move from one place to the next.



Now you can verify your target protein through the whole bioprocess from cell train to bioreactor to capture to fill. Designed to bring point-of-need, and real-time mass detection to laboratories and processing facilities, Microsaic's leading edge technology allows agile sample detection and identification. Providing access to more detailed sample data as reactions progress, the company's compact, easy to use mass spectrometer systems enable operators to make faster decisions about their reactions, to optimise overall productivity.

Robust Online Micro-Flow ESI Mass Spectrometry

The MiD® ProteinID benefits from a patented microflow electrospray ionization (ESI) source. The low flow and voltage source provides an uniquely soft and efficient form of molecular ionization.

These features make MiD® ProteinID ideally suited for the analysis of biologics and metabolites where it is vital to maintain the integrity of the molecules being properly analysed.



Key benefits

- Accurately ID target molecules, feedstocks and metabolites on the fly
- Simultaneously monitor and control your CQAs and CPPs
- Speed up time for process interventions, such as dosing, feeding strategies

Application

The MiD® ProteinID can verify your target protein through the whole bioprocess from cell train to bioreactor to drug capture to drug formulation. Solving your mass identification needs in your bioprocess both upstream and downstream. The MiD® ProteinID has the ability to accurately detect both intact proteins and metabolites in your bioreactor, with a large dynamic mass range And with the capability to observe protein structural changes such as a large range of PTMs the

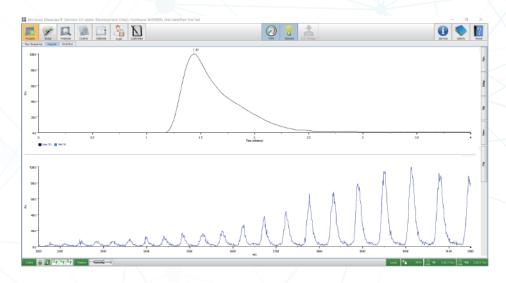
MiD® ProteinID gives you the ability to simultaneously monitor and control your bioprocess and verify your protein product.

Fast, accurate, real-time mass data of the critical process parameters and critical quality attributes allows you to make decisions faster. Saving time in manufacturing and the time to market for new biologics.



Software

The MiD® ProteinID is designed to be integrated into your workflows. Using a remote control interface from your desktop computer, or from another instrument, or even just standalone, the instrument is configurable to meet your laboratory's needs. Providing full control of sample method, data acquisition and the analysis of samples, the MiD® ProteinID features our integrated,



intuitive open-access software, Masscape®. Designed for rapid set up and ease of analysis, Masscape® also removes the need for a monitor or keyboard.Its remote control LAN connection enables deployment tanywhere in the

laboratory, or within processing facilities. In addition, it can be used off-line as a data analysis tool.

Award Winning Technology

Our MiD® ProteinID system was listed in the Top 15 innovations of 2018 in The Analytical Scientist Innovation Awards. Judged by a panel of experts, the awards commend instruments and technologies that are likely to have a significant impact across the analytical sciences.



About Microsaic

Microsaic Systems plc is a high technology company developing chip-based, bench-top and point-of-analysis mass detectors that are designed to improve the efficiency of pharmaceutical R&D and manufacturing, and have applications in environmental testing, chemical reaction monitoring, and academic teaching. The Company is working with a range of established global life science OEM partners, distributors and research organisations to co-develop and commercialise new solutions to improve productivity in the development of small molecule and novel biologic (peptides, antibodies) medicines. MS is a powerful method of analysis to enable earlier decision making relating to product identification, purity and bioactivity, and is the analytical technique of choice for biochemists across many industry sectors.

Microsaic's core products, the 4500 MiD®, and MiD®ProteinID are robust and compact MS systems, retaining the functionality of larger conventional MS systems, easier to use by non-specialists, consuming less energy and having lower running costs. For more information, please go to www.microsaic.com.

To find out more about the MiD® ProteinID

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