

---

# **PATsmart™ ZipChip®**

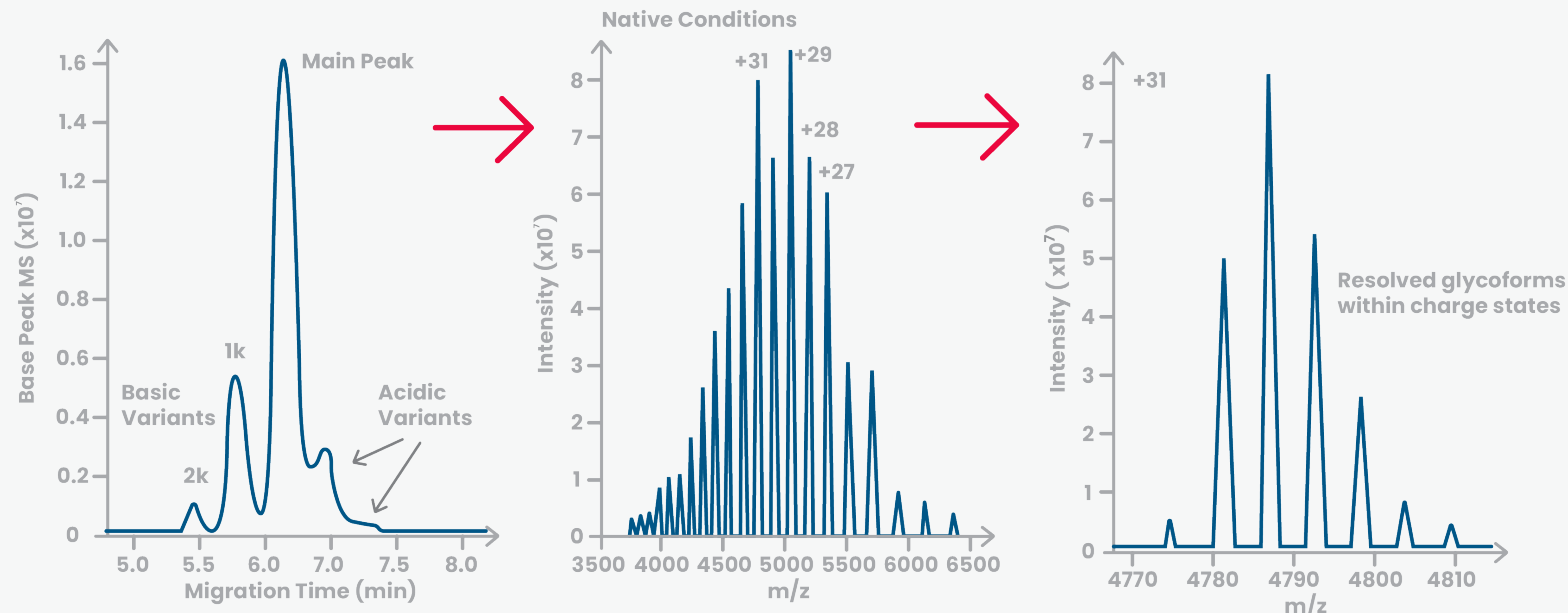
## **Accelerate your MS Characterization**

Rapid protein characterization and metabolomic analysis with microfluidic technology for highly efficient separations of complex samples.

# Biological Characterization in Minutes

## Give your mass spec some zip

The PATsmart™ ZipChip® platform prepares and separates a wide range of biological samples, then electrosprays them into your mass spec for analysis. Just clip it on. The process takes as little as a few minutes, and it results in better separation quality than most LCs in a fraction of the time. Simple workflows and multiple kit options cover a host of biotherapeutic, metabolomic, and proteomic applications.



## Easy on samples

ZipChip plays well with your mass spec and your proteins. Gentle sample prep reagents preserve structural integrity without denaturing or unfolding proteins for fully native mass spectra. No need to remove detergents or desalt. Negatives and neutrals are trashed. Only positive analytes head out for cleaner mass spectra and more identified peaks.



# Efficiency with Advanced Microchip Technology

“With ZipChip, you get the data faster, and because of that, you can make quick decisions”

—Associate Scientist at Amgen

## Easy as 1-2-3

Pick an application, a chip, and a kit. After loading the premixed background electrolyte and sample into the autosampler, pop in a **ZipChip** and hit run. Use vials or 96-well plates.

It's hands-off from there. Smart chips tell the system which method to use based on your preferences. Samples are automatically loaded, separated, and electrosprayed. Integrated software cues the mass spec to start analysis.

## Efficient separations

Microfluidic technology integrates capillary electrophoresis (CE) and electrospray ionization (ESI) on the **ZipChip**. Junctions and dead volumes don't exist, and with no injection bias, analytical quality and repeatability remain high.



## It's all in the Chip

A small sample plug is pressure-injected into the ZipChip

1

2

Voltage is applied across the separation channel

Sample migrates through microfluidic channel filled with BGE and is separated based on charge and size

3

5

Neutrals and negatives go to waste

4

Positive analytes are separated for electrospray into the MS

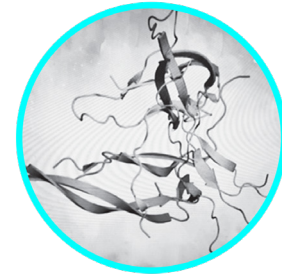
- 1** Pick your application, kit, and chip 
- 2** Simple sample prep 
- 3** Load reagent and chip, then run 

# From large to small molecules, ZipChip's got you covered



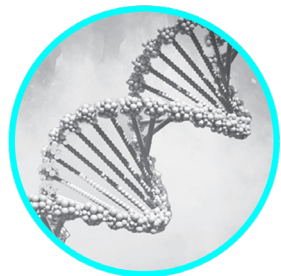
## Protein characterization

**ZipChip** is a one-stop shop for CQAs— with streamlined CE-MS workflows for Charge Variant Analysis of basic and acidic species, Rapid Intact Mass Analysis, Subunit Analysis, and Peptide Mapping for deeper characterization.



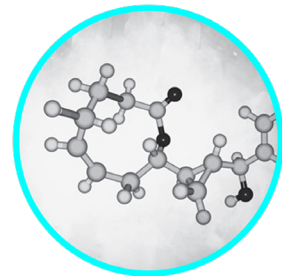
## Metabolomics

Detect, identify, and quantitate small polar analytes from a variety of matrices, like cell lysates or growth media, and monitor dynamic levels of metabolites in real time. Sample prep is quick and easy, and results are ready in minutes.



## Oligonucleotides

The characterization of nucleic acid-based drugs like oligonucleotides isn't easy. **ZipChip** can offer some advantage over LC separations, such as no ion-pairing agents to contaminate the instrument.



## Small molecules

Analysis is easy and fast with **ZipChip**. Simply dilute and shoot. There's no labeling or derivatization. Small polar analyte assays take as little as 2 minutes. Add internal standards for full quantitation of a variety of analytes.





**Boost your bioprocess today!**

© 2026 Repligen Corporation. All rights reserved. The trademarks mentioned herein are the property of Repligen Corporation and/or its affiliate(s) or their respective owners. ZipChip is subject to export controls including those of the Export Administration Regulations of the U.S. Department of Commerce, which may restrict or require licenses for the export of product from the United States and their re-export to and from other countries. | DOC0436 eRev. 2.0 26 Jan 2026

Repligen Corporation | [www.repligen.com](http://www.repligen.com) | [sales@repligen.com](mailto:sales@repligen.com)