



Maestro Z Platform

Sensitive, label-free, live-cell assays





Discover next-generation live-cell analysis

The Maestro Z platform is the simple, sensitive, *in vitro* solution for real-time cell analysis. Requiring no labels or dyes, it measures complex cellular kinetics without disturbing the underlying biology. With powerful, interactive software for fast results, see how you can accelerate your research with Maestro Z.



Continuous
label-free data



Sensitive
measurement



Friendly analysis
software

The complete assay platform

Featuring sensitive cellular impedance electrodes, precise environmental controls, and integrated automation features, the Maestro Z impedance platform has everything you need to generate reliable, reproducible data.

Key features

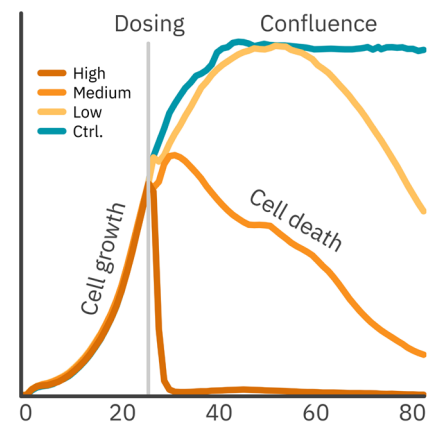
- **Simultaneous** full-plate recording
- **Built-in** environmental controls
- **Powerful**, intuitive software
- **Automation** compatibility
- **Transparent** plates
- **Barcode** plate tracking
- **21 CRF Part 11** compliant



See what endpoint assays miss

Maestro Z captures all stages of your experiment in one plate. Reveal dynamic, kinetic responses with the power of cellular impedance and see what your endpoint assays aren't telling you.

- >> **Don't disturb** *the underlying biology*
- >> **Capture chronic and acute responses**
- >> **See the full time course and analyze kinetics**



One instrument, many uses

Cellular impedance is a proven and well-established technique for monitoring key parameters of cell structure and behavior, making Maestro Z a versatile platform adaptable to the many assay needs of your lab. **The Maestro Z platform can measure:**



Proliferation



Cytotoxicity



Barrier/TEER



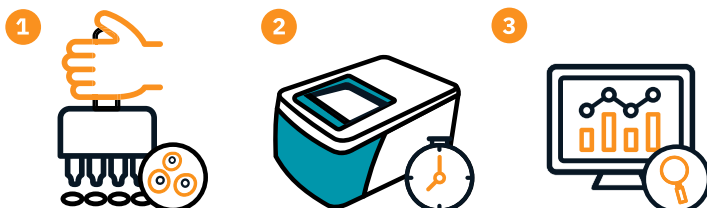
Signaling



Morphology

No labels, dyes, or complicated steps

There's no optimization of labels, dyes, or incubation times. No lot-to-lot reagent variability to confound your results. Replace costly endpoint assays with Maestro Z or easily multiplex with your favorite assays to supplement your research. **Running the assay couldn't be easier:**

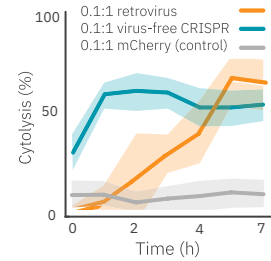


- >> **Plate & culture** *your cells normally*
- >> **Record on the Maestro Z** *and dose*
- >> **Analyze your data**

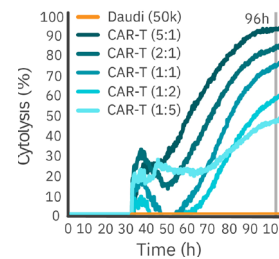
Accelerate your research with better, faster data



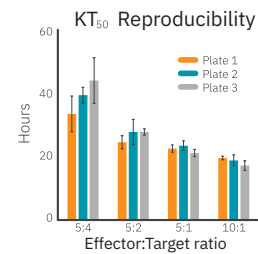
Compare conditions and make decisions on comprehensive datasets with just one plate. Here, different gene editing methods demonstrated **different kinetics**, only revealed by a continuous live-cell assay.



Sensitive electrodes provide a **high degree of resolution**. The Maestro Z assay was able to differentiate E:T ratios in this cell killing assay to effectively compare therapeutic potencies.

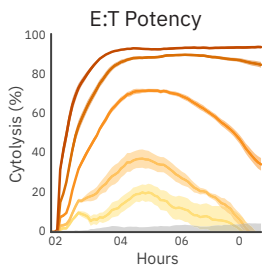


The simplicity of the assay ensures **reliable, reproducible** data. Here, minimal intra-assay variability is observed between plates.



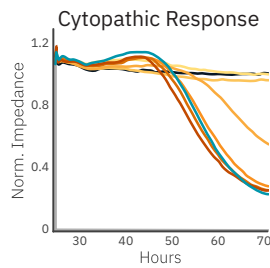
The ideal tool for discovery

Whether characterizing the development of disease models or screening new therapeutics, quality functional readouts are essential for making informed decisions. The Maestro Z platform is an essential tool in academic and pharmaceutical labs worldwide.



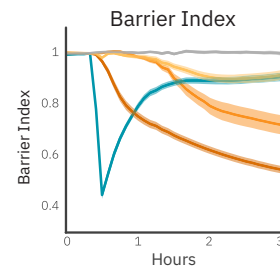
>> Oncology

Evaluate cancer cell invasion, proliferation, and killing in real time.



>> Virology

Track cytopathic effects for real time viral titer, antiviral, and neutralization assays.



>> Barrier function

Monitor cellular barrier integrity using transepithelial electrical resistance (TEER).

Focus on the science rather than the software

Simplify the setup, execution, and analysis of your experiments and go from raw data to final figures faster with **AxIS Z**. Included with all Maestro Z instruments, AxIS Z makes keeping track of your experiments simple:

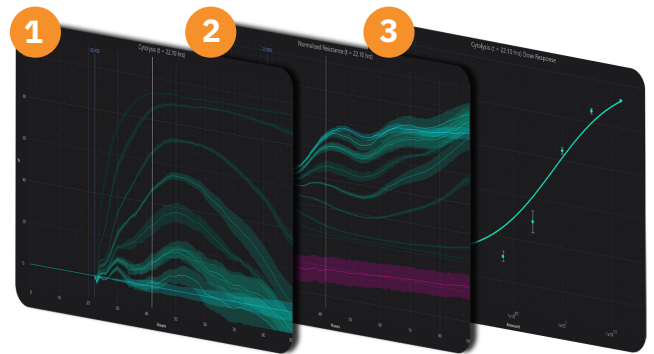
- > **No setup required** to begin recording
- > **Automated barcode and event tracking** ensures data integrity and effortless multiuser compatibility
- > **Integrated experiment database** lets you search for files by name or metadata
- > **Mobile app to monitor** your experiment outside the lab
- > **Multilayer platemapping** lets you track all conditions



Continuous data, instant analysis

Go from raw data to results in just a few clicks. **AxIS Z's user-friendly design** ensures fast, reliable data analysis.

- >> **Get multiparameter analysis** of kinetic and endpoint values
- >> **Toggle between (1) raw values, (2) calculated, or (3) EC_{50}** at with a click
- >> **View live, fully interactive plots** with quick two-click export options
- >> **Automatically apply control wells and normalizations/corrections**



Fully editable figures all in one place

Don't get bogged down with analysis file bloat. **AxIS Z's Lab Notebook** lets you **collect every plot** of interest during analysis and export it all to a single Excel file that tracks the original source and settings for each one.

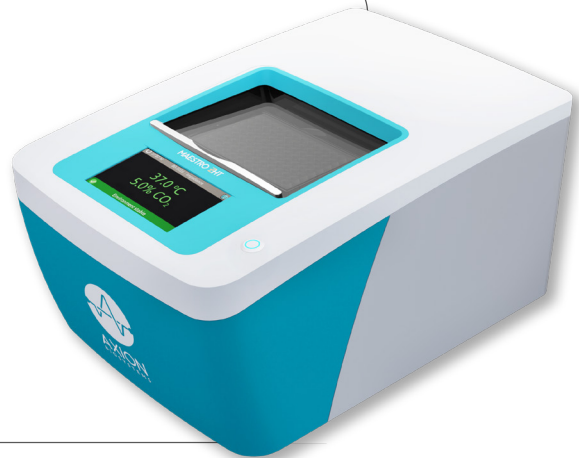
Fully customizable plots and data tables summarizing your experiment are instantly ready to copy into presentations or your preferred plotting software.



Choose the *Maestro Z for you*

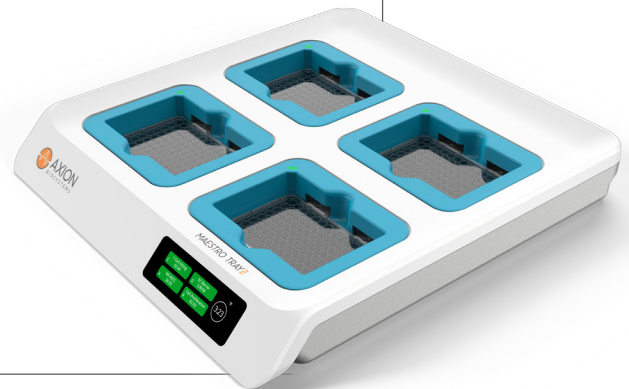
Maestro ZHT: *The best benchtop live-cell assay system*

Continuous, real-time 384-well measurements in a compact footprint will make the **Maestro ZHT the most productive spot on your bench**. Featuring integrated environmental controls and automation compatibility, meet your lab's new workhorse.



Maestro TrayZ: *An assay powerhouse in your incubator*

With a thin multiplate design developed to accommodate multiple trays in one incubator, **Maestro TrayZ is perfect for labs with limited bench space** or multiple users and simultaneous experiments.



Maestro Z: *Quality data at an affordable price*

The Maestro Z makes quality real-time data accessible to any lab. The introductory system boasts a small benchtop footprint with fully integrated environmental controls.



Impedance systems features comparison

There's a Maestro Z solution for every lab. Choose the device that works best for you.



<i>Features</i>	<i>Maestro Z</i>	<i>Maestro TrayZ</i>	<i>Maestro ZHT</i>
Throughput	96	Up to 8 x 96 wells	96 & 384
Environmental Control	Built-in	External	Built-in
GxP Compatible	✓	✓	✓
Barcode Plate Tracking	✓	✓	✓
Automation API	✓		✓
Connected Lab	✓	✓	✓
Dimensions (WxDxH)	280 x 413 x 225 mm	440 x 450 x 60 mm	280 x 452 x 225 mm



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Our commitment to our customers

With over **15 years of experience** bringing innovative new products to our customers, we strive to accelerate your research by making live, functional biology more accessible. Our design philosophy is to ensure all of our products are:



Flexible

Hardware designed for broad, integrated functionality in one instrument



Easy to use

Intuitive instruments, consumables, and software for fast, easy adoption



Smart technology

Easy to run with no complicated steps, saves time and money

Contact our scientists to discuss how we can help your research with live-cell analysis:
axionbiosystems.com/contact