AtlaZ

Quantitative Live-Cell Analytics.

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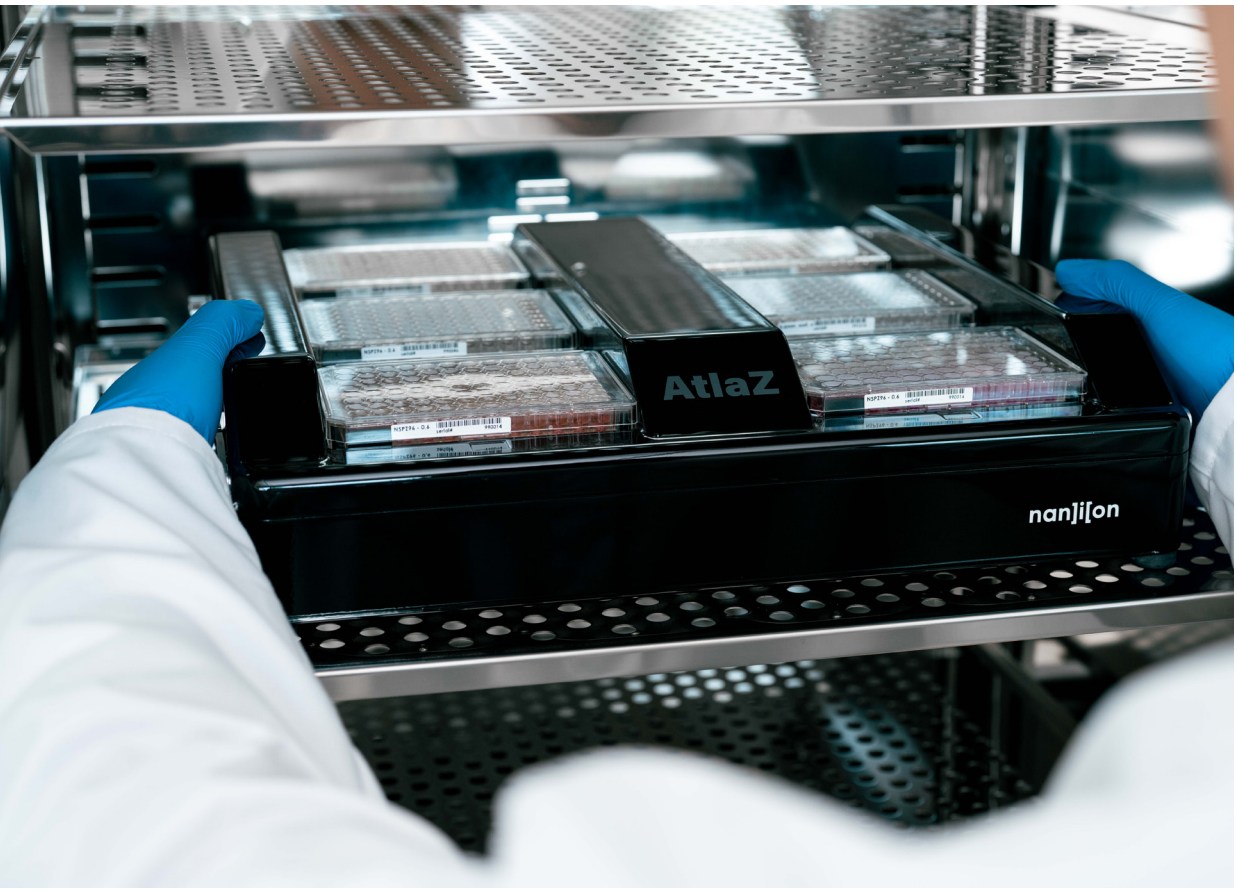
Welcome to the next level of live-cell analytics

In order to gain a deeper understanding of cellular processes, real-time and continuous monitoring is necessary to access kinetic and phenotypic data.

Electrical impedance spectroscopy as the underlying methodology of the AtlaZ system, coupled with its high throughput capability, enables the acquisition of a previously unmatched quantity and richness of information.

AtlaZ provides researchers with the capability to investigate various cellular aspects, including cell adhesion and proliferation, cytotoxicity, GPCR (G-protein coupled receptor) signaling, morphology, and barrier function, label-free and in real-time.

Multiple recording modes, including raw impedance read-out, displayed as Cell Signal, facilitate freedom of experimental design.



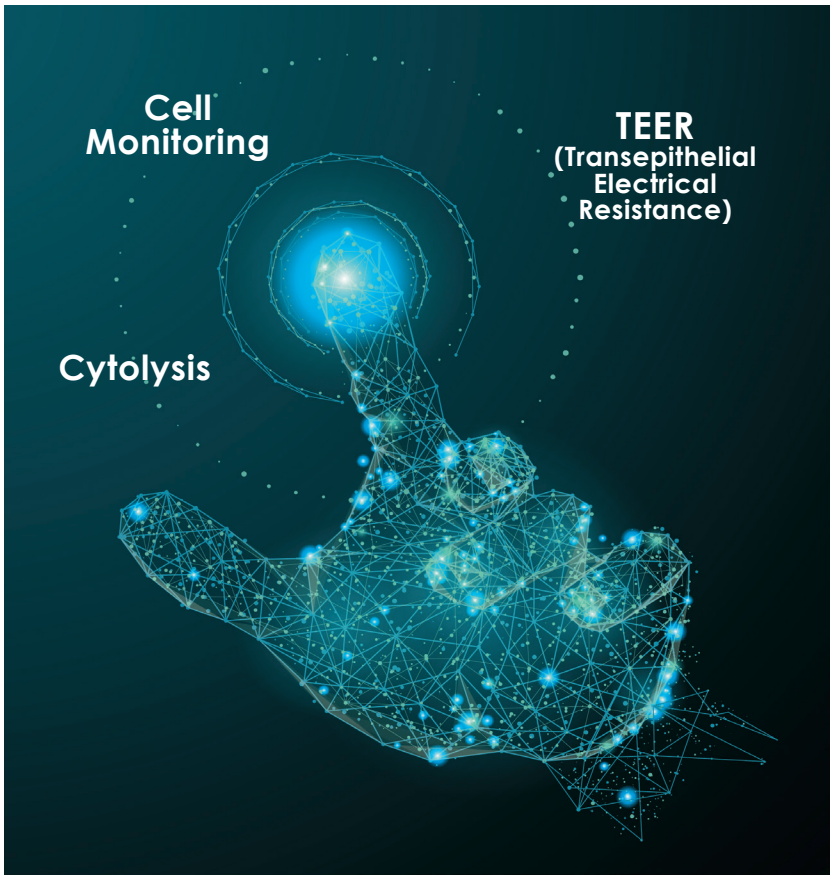
Key features at a glance

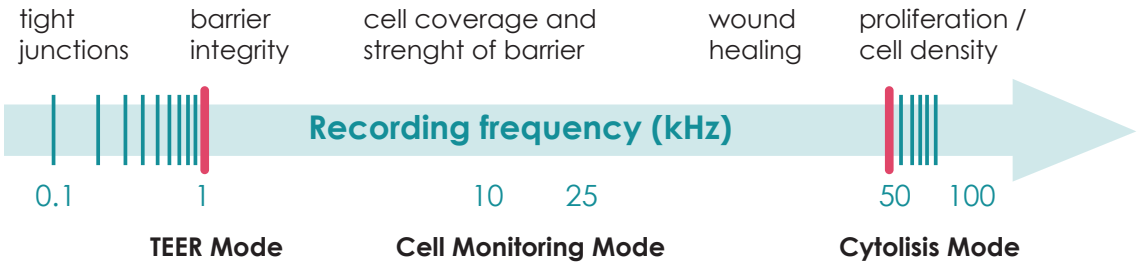
1. Real-time cell analysis
2. Label-free experiments
3. Automated graphing of results
4. Easy to use software
5. Up to 6 x 96 plates simultanously or independently
6. Electrical Impedance Spectroscopy
7. Cost efficient consumables
8. Access to raw data

Meet your goals and everyday challenges

Simplicity you will love

Different recording modes can be chosen for each plate. The Cytolysis Mode allows for investigations into cell-killing kinetics, the Cell Monitoring Mode facilitates the assessment of GPCR distal effects, and the TEER Mode enables the examination of barrier integrity. Measuring the Cell Signal at all available frequencies (full spectrum from 0.1 kHz - 100 kHz) allows to detect a multitude of physiological effects in cells. Experimental workflows with single or multiple plates are simplified with options such as resuming measurements, or predefining, saving, and loading treatment layouts.



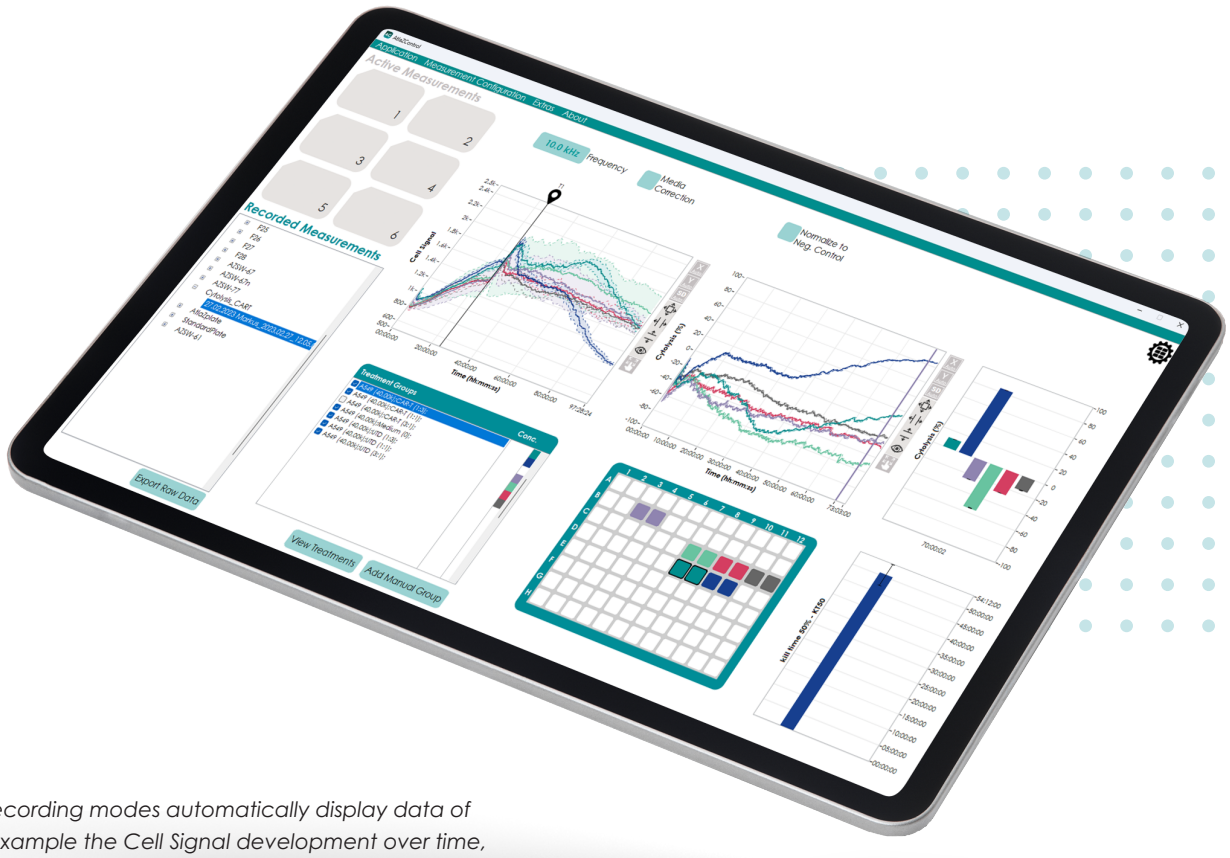


Versatile and fast data analysis and handling

AtlaZ control is a user-friendly software that combines simplicity with immense power. Its standardized measurement modes come with pre-designed recording and analysis settings, enabling a seamless and efficient analysis process. Online monitoring of multiple parameters (KillTime 50, IC_{50}/EC_{50}, Cytolysis (%) and impedance recorded from a large range of frequencies) is displayed in a single screen.

Analysis and export of raw data, final figures, and plots is effortless:

- Pre-designed analysis settings for each mode
- Automated normalization to control group
- Compound effects visible in seconds
- Automated export of analyzed data
- Raw data export: Impedance magnitude and phase, resistance and capacitance



AtlaZ Control
The unique recording modes automatically display data of interest. For example the Cell Signal development over time, KillTime 50 values and Cytolysis (%), enveloped by the standard deviation, indicate the effectiveness of cell treatments.

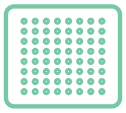
What do YOU want to explore?

Immuno-oncology / CAR T

Highly reproducible measurements provide a great insight into immune cell killing.

Cytotoxicity

Test compound toxicity and cytolysis effects on a wide range of cell types.



Cell characterization / QC

Suitable for standardized screens, with fast, precise and reproducible results.

Virology

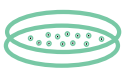
Accelerate therapy & vaccine development by real time monitoring of viral cytopathic effects (CPE).

GPCR / Receptor signaling

Decipher complex cellular signaling and receptor activation.

Barrier function (TEER)

Measure barrier integrity via Transepithelial Electrical Resistance (TEER) detection.



Cell adhesion

Monitor changes in cell number, cell size, cell barrier function, and cell-substrate attachment.

Wound healing

Detect cell densities and speed of proliferation of epithelial or other cells.

The AtlaZ includes

- **Recording unit which fits into standard incubators (incubator not included)**
- **Control unit with status display**
- **Recording and analysis software package, pre-installed on convertible laptop**
- **Barcode scanner**
- **Automated multichannel pipetting—Integra Viaflo Assist (optional)**
- **Transparent AtlaZ recording plates (NSP-Z)**
- **1 year warranty with further optional comprehensive service plans available**
- **Unmatched application support**

Specifications

Supported recording modes	**Cytolysis-, Cell monitoring-, TEER signal - mode; full spectrum**
Impedance & Frequency resolution	**10 mOhm; 100 Hz**
Range electrical impedance spectroscopy	**0.1–100 kHz**
Parallel recording channels	**1 x 96 or up to 6 x 96**
Readouts	**Impedance magnitude and phase, resistance, capacitance**
Software license	**Not limited to one device**
Dimensions recording unit	**40,5 x 40,5 x 10 cm**
Dimensions control unit	**19 x 19 x 18 cm**
Automated liquid handling	**Integra Viaflow Assist (optional)**
Raw data export	**Yes**
Plates available	**Transparent plates**

accelerate your research

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