



Gyrolab® Systems

Immunoassays the way
you've always wanted

GYROS PROTEIN
Technologies



Automated. Nanoliter-scale. Market validated.

Trusted around the world

A majority of the world's leading biopharmaceutical companies and CROs use Gyrolab® immunoassay technology. Many employ multiple systems. It's not hard to see why.

Gyrolab users regard this system as a must-have technology for accelerating biopharmaceutical development and production. Speed of assay development plus small sample and reagent volumes, as well as the ability to measure concentrations over a broad dynamic range with minimal matrix interference are key attributes for their time critical workflows.

Furthermore, the open Gyrolab platform is constantly expanding. As well as ever more advanced instrumentation and software, the range of optimized, ready-to-use kits for cell line development, bioprocessing applications and pre-clinical PK/TK continues to grow.



Boost workflow efficiency

The technology uses an affinity flow-through column format that eliminates incubations and shortens run times with a hands-free workflow. This simplifies assay workflows considerably and boosts efficiency.

Gyrolab instruments and control software hand you high-quality results within one hour, allowing you to make sound, data-driven decisions to meet critical timelines for all stages of biotherapeutic development.

Maximize assay-day productivity

Whether you work in biopharmaceutical discovery, preclinical & clinical development or bioprocessing, Gyrolab maximizes your assay-day. Gyrolab platforms let you set up runs faster and analyze data quicker than ever before. For example, the option to perform five CD runs with Gyrolab xPand vastly increases throughput. Acquire up to 560 data points in less than five hours, quickly, efficiently and reliably and with a great degree of unattended operation!

More samples run per day means more projects run on time – or faster. And the faster projects are completed, the sooner biopharmaceuticals are commercialized.

Customer example:

A company routinely develops PK assays and transfers them to a CRO for sample analysis. By switching to Gyrolab technology, internal method development was reduced from three months to three days. The CRO validation took one week instead of the usual one month. Finally, the CRO was able to run 2000 samples/week instead of 300. All in all, the project was completed four times faster when using Gyrolab technology.

Gyrolab® platform versus conventional ELISA

1. Assay development time.

Shortened.

Gyrolab Platform

3 days

M	T	W	T	F	S	S	M	T
●	●	●						

ELISA

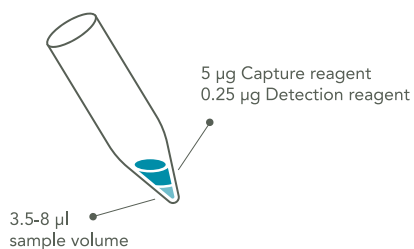
7 days

M	T	W	T	F	S	S	M	T
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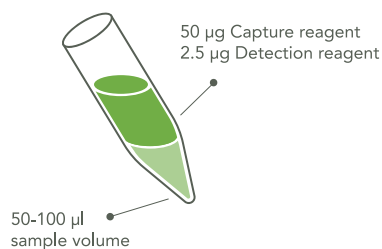
2. Sample volume & Reagent consumption.

Reduced.

Gyrolab Platform

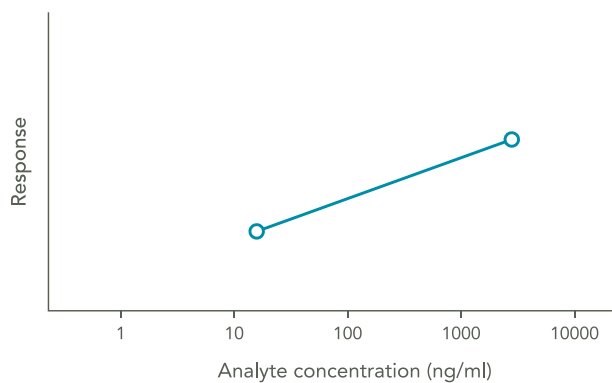


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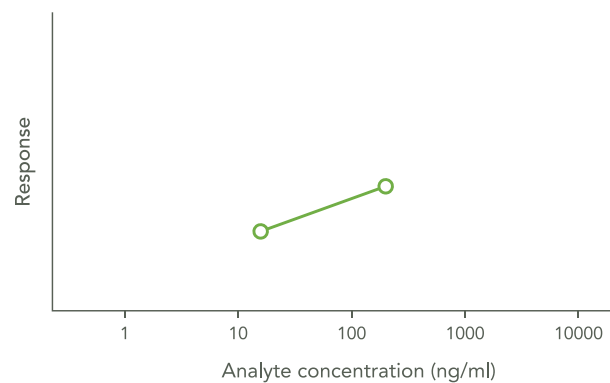


3. Dynamic Range. Extended.

Gyrolab Platform



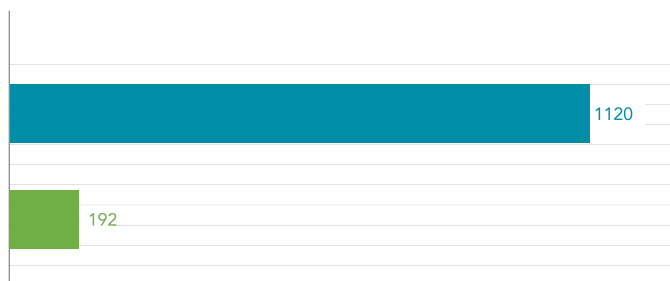
ELISA



4. Data points per day. Multiplied.

Gyrolab Platform

ELISA



Gyrolab® xPand

Packed with 'must-have' functions to maximize your assay-day

Gyrolab xPand combines the best of Gyrolab technology with software that makes setting up and running assays easier than ever. This multi-CD instrument is packed with essential functions requested by users wanting greater flexibility, higher throughput, unattended operation and rapid analysis of large sample numbers.

For instance, methods can be mixed and matched as you wish. Perform five CD runs with one assay and many samples, or run different assays on different CDs all in one operation. A huge gain in flexibility as well as optimized use of time and sample capacity.



Refrigerator or Gyrolab xPand? Your samples will never know the difference

Gyrolab users have told us of their concern about the possible adverse effects of temperature differences between sample storage and their Gyrolab unit. Since Gyrolab xPand maintains a cool working temperature of 2-8°C, your samples will never know they left the refrigerator. A comforting thought for both you and them.

Gyrolab xPlore™

Big benefits in a miniature format

Single-CD Gyrolab xPlore helps you explore more, faster than before. Using the same proprietary Gyrolab technology as Gyrolab xPand, it generates up to 112 high-quality data points per CD within one hour.

The well-recognized attributes of automated nanoliter-scale workflows and broad dynamic range are put to good use on Gyrolab xPlore in a wide range of applications from PK/TK studies to quantifying contaminants in downstream processing.

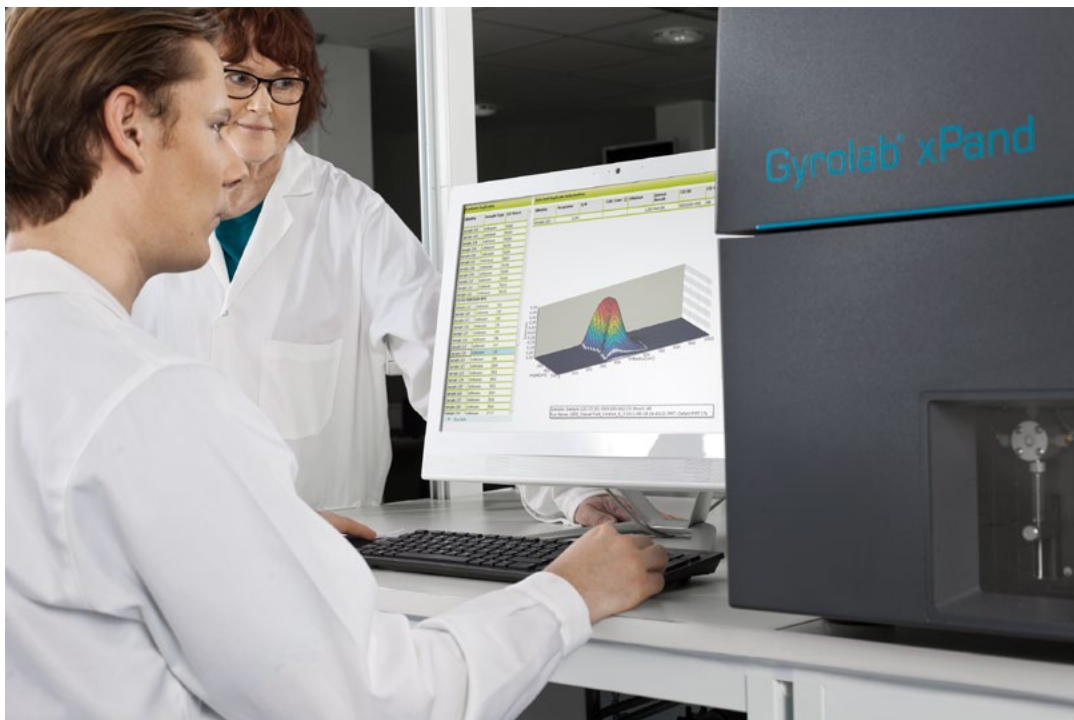


Software so good you could have designed it yourself

Actually you did. Here again, experienced Gyrolab users have helped refine a host of software functions. Imagine setting up several samples with many different combinations of dilutions and spiked concentrations. The software delivers the results automatically, a first-class example of collaboration with our Gyrolab users. Five software modules are included in Gyrolab xPand.

Common compliant software

Both Gyrolab xPand and Gyrolab xPlore include powerful, pre-installed software that facilitates data collection, analysis and presentation. Furthermore, data are integrated directly with user LIMS and/or internal systems. All programs are designed for 21 CFR part 11 compliance, ensuring straightforward assay development and transfer within regulated environments.



Gyrolab technology at work

Gyrolab technology combines the benefits of microfluidic miniaturization, integration and automation to solve challenges in the development and production of biotherapeutics, vaccines and immunotherapeutics.



Automated nanoliter-scale immunossays

Gyrolab technology simplifies immunoassay workflows in a CD format by eliminating incubations and shortening run times. Centrifugal force, capillary action and hydrophobic barriers precisely control the parallel processing of up to 112 data points per CD.

Broad dynamic ranges can be measured, reproducibility is exceptional, and repeats are kept to a minimum. The automated workflow saves you time, sample and reagents.

Hydrophobic breaks

ensure consistent volume delivery

Overflow channel

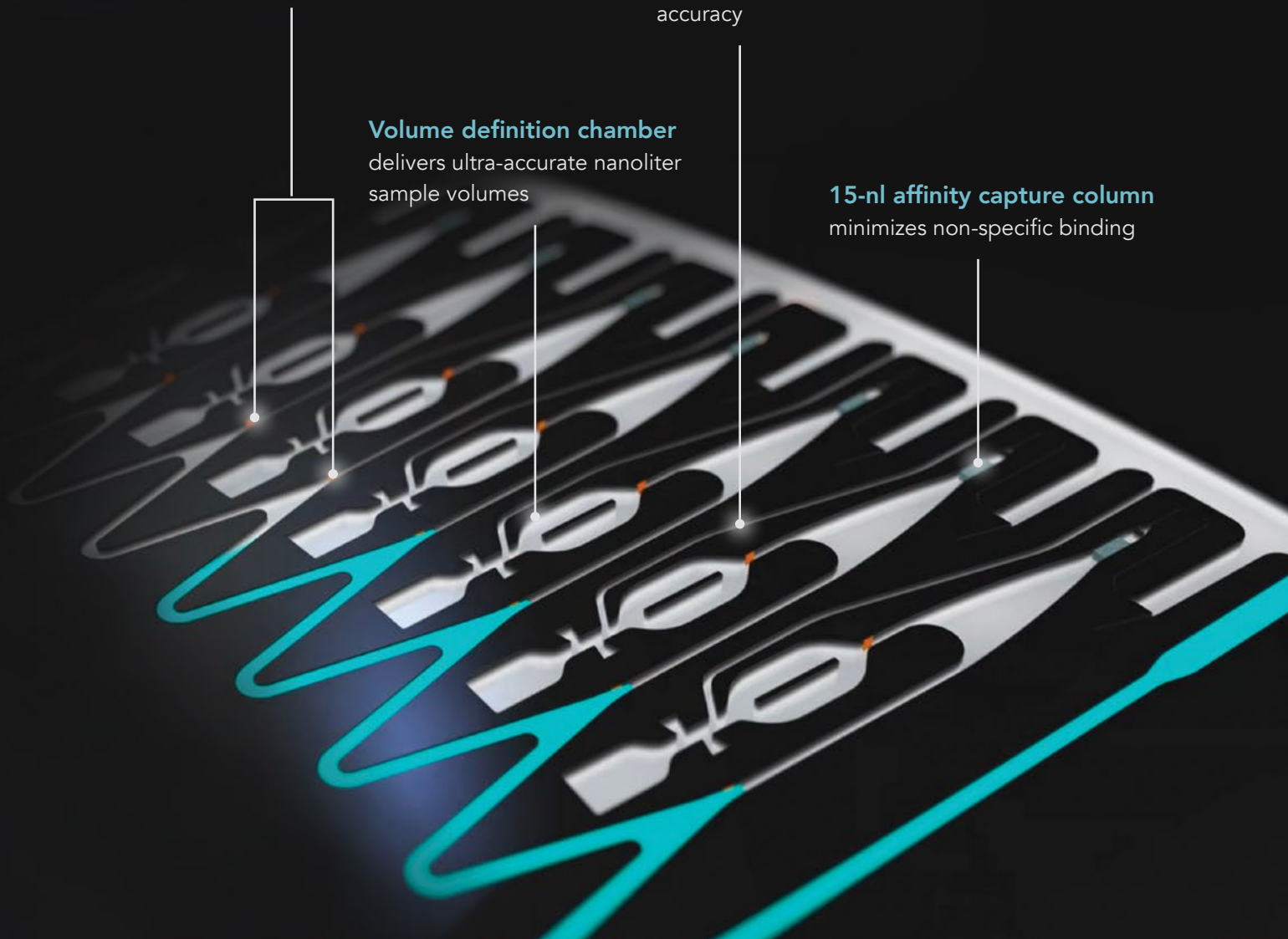
eliminates need for pipetting accuracy



Volume definition chamber

delivers ultra-accurate nanoliter sample volumes

15-nl affinity capture column

minimizes non-specific binding



	 Gyrolab xPand	 Gyrolab xPlore
Maximum CDs per run	5	1
Maximum data points per run	560	112
Time for 1 CD run	Approx. 1 hour	Approx. 1 hour
Throughput per working day	Up to 1120 data points	Up to 672 data points
Walk-away capability	Unattended 5 CD runs	Unattended 1 CD runs
Sample storage temperature	2-8°C or ambient temperature	Ambient temperature
Gyrolab Control Software version	8.0	7.2
Gyrolab Evaluator Software version	3.5	3.4
Gyrolab Manager Software version Functionalities include: <ul style="list-style-type: none"> • Desktop planning of experiments • Advanced setup of dilution linearity and spike recovery experiments • Mix and match assays in one run 	1.0	N/A
SW modules included: <ul style="list-style-type: none"> • Gyrolab Viewer • Gyrolab Affinity • Gyrolab ADA • Gyrolab Control Report • Gyrolab LIMS Interface 	✓ ✓ ✓ ✓ ✓	Add-on modules purchased separately
Pressurized air supply needed	Yes	No

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