

• Absorbance
• Well-Imaging
• Fluorescence

• Alpha Technology
• Ultra-Sensitive Luminescence
• Time-Resolved Fluorescence (TRF)

IMAGING

Excitation 320 or 340 nm
FRET
Fluorescent Emission 615 nm
TR-FRET Emission 665 nm
LANC

Alpha Donor Bead
Alpha Acceptor Bead
ALPHA

ABSORBANCE
Microplate

LUMINESCENCE

FLEXIBILITY AND SENSITIVITY TO
ADVANCE YOUR SCIENCE



EnSight® Multimode Plate Reader

TRANSLATING RELEVANT RESULTS INTO REAL INSIGHTS



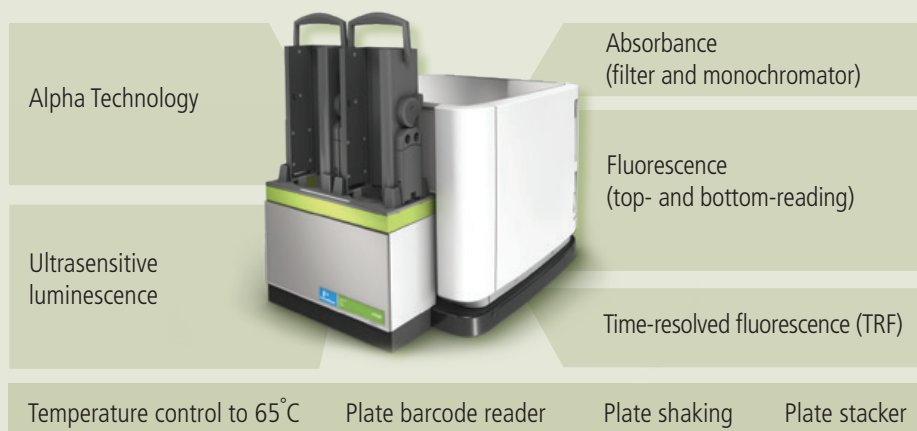
THE WAY TO GREATER CONFIDENCE IN YOUR RESULTS

Today's leading scientists are continuously seeking new ways to increase certainty and confidence in their results, improve biological understanding, and enable better decisions sooner.

The EnSight system's modular design lets you add detection modes as your needs change. Combine that with workflow-based Kaleido™ data acquisition and analysis software, and you have a truly versatile plate reader that gets users productive quickly – making it ideal for multiuser environments.

The EnSight multimode plate reader: New insights. More relevant data. And greater confidence in your results.

The Right Technology and Modality for Every Application



AN ORTHOGONAL APPROACH BRINGS NEW PERSPECTIVES



To have greater confidence in your results, you can adopt different approaches that yield alternative perspectives. The EnSight multimode plate reader enables you to take an orthogonal approach to your research, using many different modes of detection.

The right technologies for your application

Your plate reader needs to accommodate a wide variety of application demands. The EnSight system is extremely flexible, so you can select the right combination of technologies to match your research needs today – and in the future. You also benefit from our many years of experience in developing both reagent technologies and plate readers to achieve optimum results for your applications.

Alpha Technology

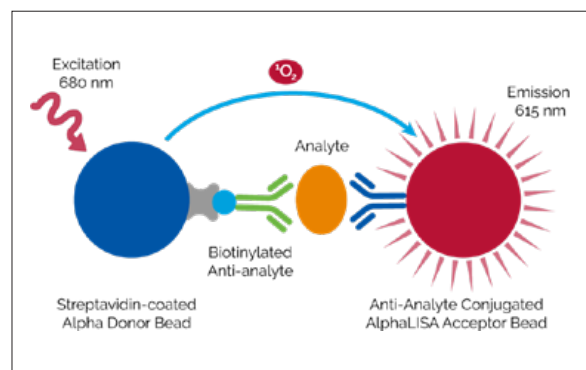
Eliminate time-consuming ELISA wash steps, extend the dynamic range, and improve sensitivity with this versatile, bead-based platform. Our proprietary AlphaLISA® and AlphaScreen® platforms let you detect virtually any molecule – from large endogenous protein complexes to very small peptides.

AlphaLISA technology offers the greatest dynamic range (no dilutions) and sensitivity, with almost two logs more signal at the lower detection limit than ELISA. Plus, it has fewer assay steps (no washing) and requires half the time to perform the assay. This technology delivers seconds-long emission times of the excited Alpha sample and establishes an extremely sensitive light-detection mode.

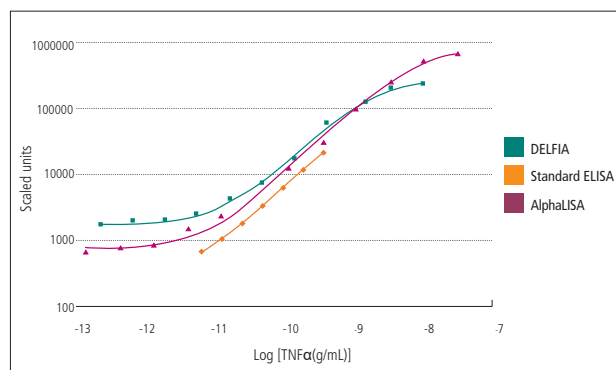
The EnSight system features Alpha detection technology that is optimized for high-throughput screening, the HTS Alpha module. Compared to standard Alpha modules, the HTS setup offers greater sensitivity, reduced crosstalk between wells, and a much faster read time per plate.

Key Applications

- Biologics
- Biomarkers
- Epigenetics
- Next-gen ELISA
- Kinases
- Protein:protein interactions
- GPCRs



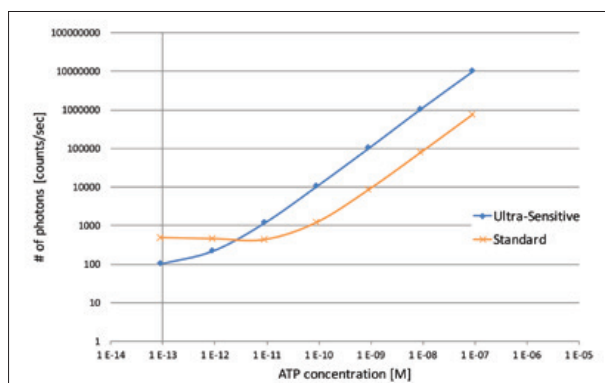
Alpha beads are brought into proximity by binding to the analyte via specific antibodies. The donor bead is excited by laser, releasing singlet oxygen that travels to the acceptor bead and induces emission of a light signal.



Compared to standard ELISA, AlphaLISA technology offers the greatest dynamic range and sensitivity, with fewer assay steps and a shorter protocol. For samples that require a wash step, DELFIA® TRF technology provides significant improvements to sensitivity and extended dynamic range.

Ultrasensitive Luminescence

If you're working with precious samples such as primary cells or are unable to detect your sample because of low signal, our unique ultrasensitive luminescence technology option could be the solution. You can see significant increases in sensitivity and dynamic range, and reduce reagent and substrate costs. And you can use it with our highly sensitive, homogenous lites® luminescence assays to generate optimum results from reporter gene, cytotoxicity, or cell-proliferation screening assays.



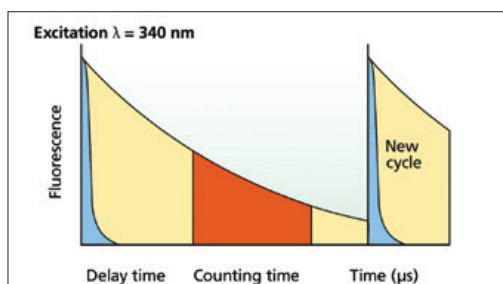
Comparing the ultra-sensitive luminescence module with a standard luminescence module shows a more than 10-fold improved lower limit of detection and a greater dynamic range when using same acquisition time.

Key Applications

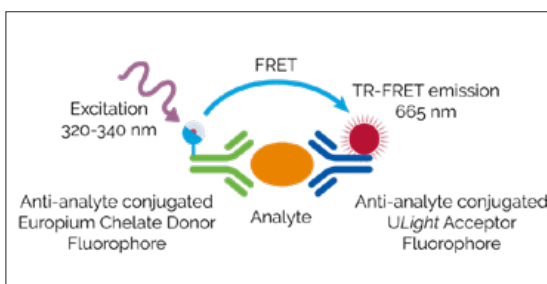
- Reporter genes
- Cell proliferation
- Cell toxicity and viability
- Circadian rhythm
- Primary cells
- Cellular assays
- Low transfection rates

Time-Resolved Fluorescence and TR-FRET

Improve the sensitivity and dynamic range of your immunoassays, even when sample is at a premium or in low concentration. TRF detection, together with our lanthanide-based DELFIA or LANCE® chemistries, offers enhanced signal-to-background ratio, high sensitivity, wide dynamic range, superior stability, and excellent flexibility for biological, cellular, or biochemical assays.



In TRF, measurement is delayed after excitation until background emissions have decayed (Blue: Excitation pulse, Yellow: Fluorescence signal, Orange: Detection period).



Ideal for high-throughput screening, LANCE biochemical TR-FRET assays are sensitive, homogeneous, and easy to use.

Key Applications

- Immunodetection
- ELISA enhancement
- Receptor-ligand binding
- Enzyme assays
- Cell toxicity
- Cell proliferation
- Biodistribution
- Protein:protein interactions
- GPCRs
- Biochemical kinase activity
- Epigenetics

Fluorescence and Absorbance with Quad Monochromator

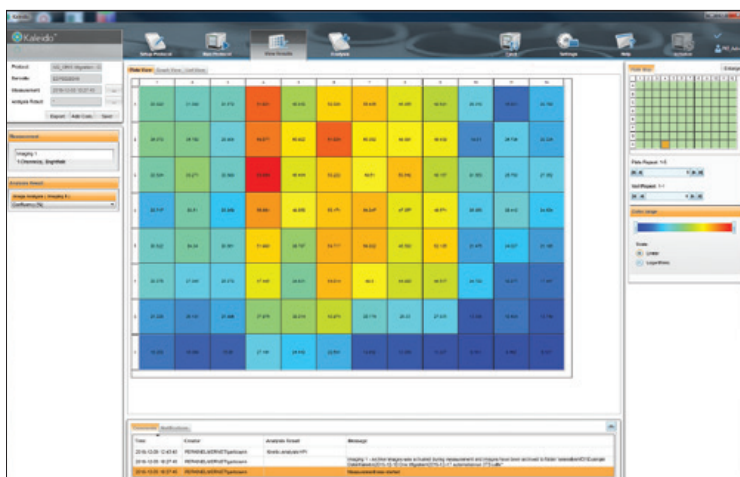
Prevent high background when measuring fluorescent proteins, identify peak wavelengths more accurately, and eliminate the need to exchange filters: A quad-monochromator for fluorescence and absorbance enables you to select any wavelength and perform scans for the best possible signal-to-background ratio for fluorescence applications. You can also perform GFP and other fluorescence bottom-read cell-based applications.

Key Applications

- GFP, RFP detection
- ELISA
- Protein quantification
- DNA/RNA quantification
- FRET
- Gene expression
- Cell counting
- Colorimetric assays

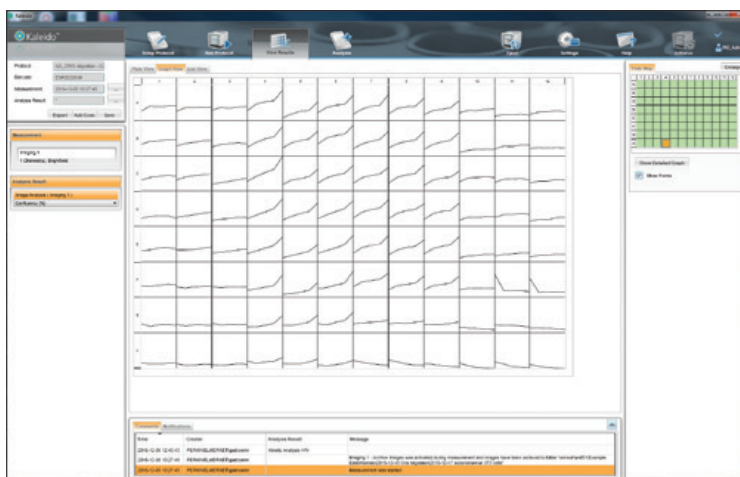
SOFTWARE THAT BRINGS IT ALL TOGETHER

Workflow-based Kaleido data acquisition and analysis software is simple to learn and gets you productive right away. The user interface guides you through your experiment, making it easy to set up and run your multi-technology protocols. You can also export your data or metadata as a single file for further analysis.



Kaleido data acquisition and analysis software has a workflow-based interface that guides you through your experiment.

Users can choose how to set up protocols based on their skill and confidence level. Ready-to-go protocols get you started quickly. This is ideal for beginners and everyday applications. The software's task toolbox lets you combine tasks to build your own protocols, so you can get results quickly and you can take advantage of custom analysis solutions for advanced applications, available on special request. Finding your way around the software and your data is easy.



Choose how to view your results – either in plate view, graph view, list view, or as images. Here you see the graph view for a kinetic assay.

Our Enhanced Security option provides technological controls and features that support 21 CFR Part 11 compliance. It empowers users based on their authorization level to assign access, implement data security, approve workflows with electronic signatures, and view all user actions from a comprehensive audit trail.

Everything You Need to Move Your Research Forward

Intuitive data analysis software

The EnSight reader comes with MyAssays Desktop Pro software, enabling you to access a growing online database of data analysis protocols from myassays.com, including assay kits and reagents such as Alpha, DELFIA, LANCE, and ATPlite™. The Desktop Pro version also allows you to create custom protocols and to edit or extend them to suit your applications.

Assays and reagents for virtually any application

Our industry-leading reagents and assays include ELISA-alternative Alpha Technology, LANCE TR-FRET and DELFIA TRF, and lites luminescence assays. And if you don't find what you need, our specialist team can develop custom assay solutions for you.

Better microplates mean better results

We have microplates for virtually any assay: High-throughput cell-based assays, plates designed to preserve sample, and many more. Plus, we deliver half-area 96-, 96-, 384-, and shallow-volume 384-well plates in a variety of colors, to suit your assay requirements.

Count on our support

Your application needs are as individual as you are. So we take a consultative approach to every engagement with you. Our expert global service and support teams, comprising of dedicated lab- and field-based applications specialists, can work with you in partnership to overcome the unique challenges your application brings.

Meet the Rest of Our Multimode Detection Family

Our comprehensive portfolio of multimode plate readers offers a range of detection technologies to ensure we have the needs of your lab covered. Combine them with our broad portfolio of reagents, microplates, and proprietary assay technologies and you have a complete solution that provides optimal performance in the application areas you rely on most. Choose the right reader for your lab's needs.



	VICTOR® Nivo™	EnSight®	EnVision®
UV-Vis Absorbance	Filter or spectrometer	Filter and quad monochromators	Filter and/or quad monochromators
Fluorescence Intensity	Filter	Quad monochromator	Filter and/or quad monochromators
Luminescence	• ¹		• ¹
Ultrasensitive Luminescence		•	•
TRF and TR-FRET	•	Lamp based	Lamp or laser based
Fluorescence Polarization	•		•
Alpha (Laser-Based)	Alpha Standard	Alpha HTS	Alpha Standard or Alpha HTS
AlphaPlex (Laser-Based)			Alpha Standard
Dual PMT Detector			•

¹ - Capable of BRET/BRET2 assays.

Learn more at www.perkinelmer.com/ensight

PerkinElmer, Inc.
940 Winter Street
Waltham, MA 02451 USA
P: (800) 762-4000 or
(+1) 203-925-4602
www.perkinelmer.com



For a complete listing of our global offices, visit www.perkinelmer.com/ContactUs

Copyright © 2023, PerkinElmer, Inc. All rights reserved. PerkinElmer® is a registered trademark of PerkinElmer, Inc. All other trademarks are the property of their respective owners.

1152989 (1155246)