



SO MUCH SCIENCE

SO LITTLE BENCH SPACE



VICTOR Nivo™ Multimode Plate Reader

For research purposes only. Not for use in diagnostic procedures.



CLEAR A LITTLE ROOM FOR
THE NEXT BIG THING IN
PLATE READERS

COMPACT AND LIGHTWEIGHT WITH A MODERN INTERFACE, IT FITS ANY BENCHTOP—AND BUDGET

Building on our pioneering family of benchtop multimode plate readers, the VICTOR Nivo™ multimode reader breaks new ground, packing all popular detection modes into the industry's smallest benchtop footprint.

The successor to the highly popular VICTOR X system – the world's first multimode plate reader – the VICTOR Nivo system detects the most popular technologies: absorbance, luminescence, fluorescence intensity, time-resolved fluorescence, and fluorescence polarization.

It's perfect for everyday biochemical and cell-based assays, including kinetic measurements, and it can perform top and bottom reading of all technologies. Its 32-position filter storage system lets you measure at the wavelengths that best suit your applications, while an optional dispenser enables detection of fast responses and the addition of reagents. The temperature control and the option of a gas-control unit give the best integrity for live cell-based assays.

Plus, with the VICTOR Nivo software, you can control the instrument remotely via Wi-Fi from a PC or even your tablet. And it's simple for anyone – novice or expert – to learn and use, thanks to its workflow-oriented interface.

Best of all, these features and functionality are housed in a compact instrument that's ideal for the benchtop, biosafety cabinet, or incubator – and it can be transferred easily between workspaces.

The VICTOR Nivo system: This is big news in a small, affordable package.

VICTOR Nivo Multimode Plate Reader



The VICTOR Nivo Multimode Plate Reader is a compact, white benchtop instrument with a green accent on the top and front. It is shown with two microplate readers in front: a white OnePlate 96 and a black SuperPlate 96. The instrument is surrounded by green callout boxes listing its features and specifications.

Absorbance	Wi-Fi Remote Control		
Luminescence	Fluorescence Polarization		
Fluorescence Intensity	Time-resolved Fluorescence		
Temperature Control (to 65°C)	Plate Shaking	Dispenser	Gas Control
Plate Formats: Up to 1,536 Wells			
Dimensions and Weight: H: 27 cm W: 20 cm D: 50 cm W: 15 kg			

A COMPACT PLATE READER THAT'S BIG ON RESULTS

We fit your application

The VICTOR Nivo multimode plate reader is a fully equipped, high-performance, filter-based system with all the detection modes you need for everyday biochemical and cell-based assays – all in a compact, lightweight format that frees up valuable bench space for other activities.

It's on your wavelength

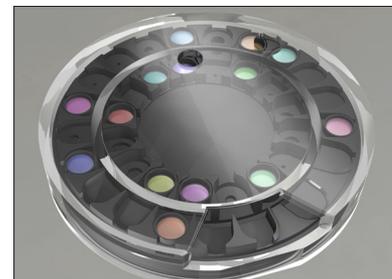
At the heart of the VICTOR Nivo reader is a dynamic filter wheel system. It provides space for up to 32 filters for a multitude of dyes, which is important when you're developing and optimizing assays and ensures that your lab's varying needs are met on a single instrument. In addition, with the dynamic wheel system, filters are:

- Exchanged between the inner and outer wheels
- Used for either excitation or emission lightpaths
- Locked in position so they don't get lost – ideal for multiuser labs

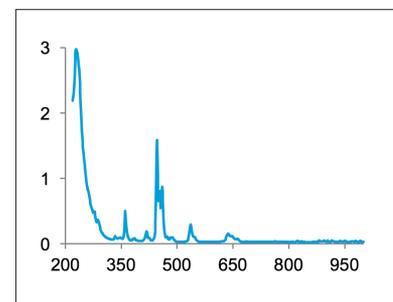
When fully loaded, the system enables the detection of a large number of dyes with better sensitivity and greater cost-effectiveness than a monochromator.

For absorbance, choose from a filter- or spectrometer-based system. Full spectrum absorbance measurements are ultrafast – 230 to 1,000 nm at selectable resolutions (2nm, 5nm or 10nm) in less than one second per well. In addition, you can:

- Detect up to eight discrete wavelengths at once in a single measurement with no wavelength switching
- Characterize a wide range of dyes or samples with unknown absorbance spectra



Dynamic filter wheel with 32 filter positions for flexibility—and they won't get lost in the lab.



Spectrum scan of holmium oxide test sample demonstrating the spectral resolution of the absorbance spectrometer.

Dispensing real flexibility

For assays that require measurement directly before and after the addition of reagents, such as fast kinetics or flash luminescence assays, you can equip the reader with a dispenser module. It's a dual injector system that enables, for example, dual-luciferase reporter-gene assays such as our twinlite™ technology. It also allows you to add small volumes to wells and then follow responses. There's easy access for priming and rinsing, and for maintenance, and it automatically checks that plates are inserted into the instrument before dispensing to avoid contamination.



Choose the optional dispenser module for assays such as fast kinetics, flash luminescence, and dual addition.

Bringing cell-based assays to life

You can keep your cells alive and healthy during long-term kinetic assays with integrated temperature control (up to 65°C) and the optional gas control unit. In addition, you can control O₂ concentration for hypoxia assays.

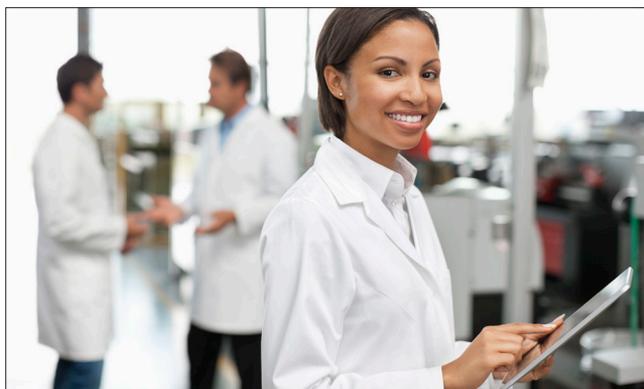
The reader provides top and bottom reading for all modalities. Bottom reading is often preferred for assays using adherent cells, and the innovative optical design ensures excellent bottom-read performance.



An optional gas-control unit is available for cell-based assays.

Set up, run, and monitor from wherever you are

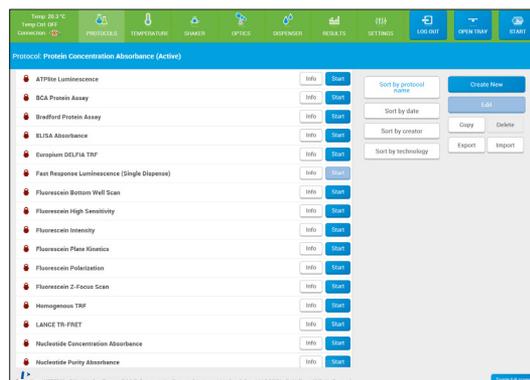
Whether it's located in a biosafety cabinet or a nearby lab, you can set up, operate, and monitor your VICTOR Nivo system via Wi-Fi or a network connection. The system's browser-based control software is not dependent on a specific operating system, so it can be controlled through a variety of touchscreen devices, including Windows® or Mac OS® PCs, and even Android-based tablets with browser software such as Google Chrome™ and Microsoft Edge – the choice is yours. Plus, you can monitor progress and access your data remotely, even from your tablet.



Get productive right away

The VICTOR Nivo control software has a modern workflow-oriented user interface that's intuitive and easy to learn for everyone in the lab. It features predefined application protocols for assays such as DNA quantification or ELISA that get scientists productive quickly – perfect for multiuser environments.

- Prewritten protocols and templates for popular applications
- Easy to learn, with no knowledge of detection technologies required
- Simplified kinetic reads and multitechnology operations
- Fast data export



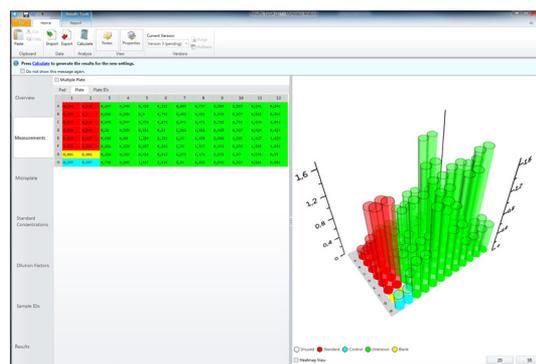
Everyone in your lab can quickly learn to use the VICTOR Nivo system, with its intuitive software interface.

The way to get from analysis to insights

For data analysis, your VICTOR Nivo instrument includes MyAssays Desktop Standard software, featuring an integrated search-and-download function for direct access to the growing online database of data analysis protocols from myassays.com. The preconfigured protocols are ready to download and integrate into your lab's workflow, and they cover all the popular applications, including PerkinElmer assay kits and reagents such as DELFIA®, LANCE®, and ATPlite™. Plus, optional MyAssays Desktop Pro enables you to create custom protocols and to edit or extend selected preconfigured protocols.

MyAssays Desktop Standard provides first-class tools for:

- Preconfigured data analysis for popular assays available for download
- Data importation
- Data visualization (3D view, heatmap, kinetic overlay, spectral plot)
- Data analysis (including advanced curve fitting)
- Reporting (Excel objects and templates for Word)
- Exporting to popular formats such as XLSX, PDF, DOCX, HTML



The MyAssays preconfigured protocols are ready to download and integrate into your lab's workflow.

THE PLATFORM FOR THE APPLICATIONS YOU RELY ON MOST

The right technologies for your applications

Your plate reader needs to accommodate a variety of application demands, and the VICTOR Nivo system is equipped for a wide range of assay types for basic research and assay development.

And for optimum results from your applications, you can use VICTOR Nivo together with our broad range of reagents that have been developed on our family of plate readers.

Applications

Cell viability/proliferation/toxicity
Drug screening
Pathway analysis
Receptor panning
Biomarkers
Protein:protein interaction
Gene expression
Food monitoring
Epigenetics

Assay Formats

Cell-based
Biochemical
Binding
Kinetics
Immunoassay/ELISA
Quantification (DNA/RNA, protein)
Reporter gene/GFP
Primary cells

Targets

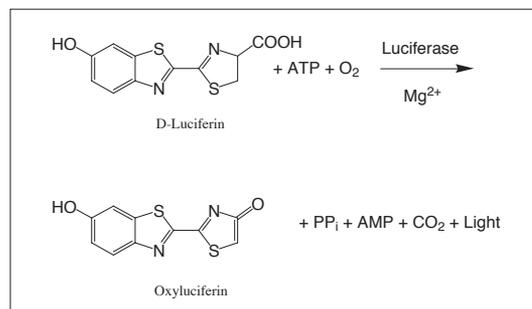
GPCRs
Kinases
Protease
Ion channels
Cytokines

It's the system that fits your mode

Luminescence

The VICTOR Nivo system can detect a range of luminescence assay formats, including glow and BRET, and flash or dual glow (when combined with the dispenser) – perfect for applications such as reporter gene, cytotoxicity, and proliferation assays.

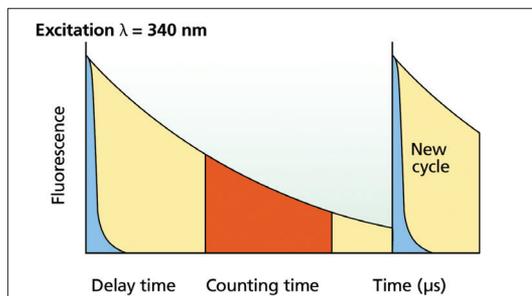
For efficiency, speed, simplicity, and cost effectiveness for both research and drug discovery, you can count on our lites® family of homogeneous luciferase-based assay systems, providing high sensitivity in a convenient microplate-based format.



In our lites luminescence assays, light is produced when the high energy substrate, luciferin, is oxidized in the presence of luciferase

Time-resolved Fluorescence

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).

Fluorescence Intensity

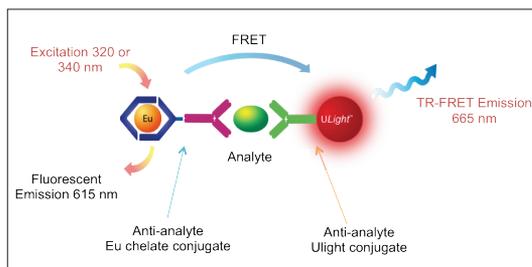
Fluorescence intensity is one of the most popular detection modes, and there are innumerable fluorophores available for applications such as DNA or protein quantitation, reporter-gene expression, and protein binding.

Fluorescence Polarization

Fluorescence polarization is a homogeneous assay technology that's ideal for high-throughput screening. Fluorescein is the commonly used fluorescent label and is suitable for typical applications such as receptor-ligand binding, protein interaction, or hapten immunoassays.

Absorbance

Absorbance detection is one of the most well-established microplate assay formats and is perfect for assays such as ELISA, protein and nucleic acid quantification, and enzyme activity.



LANCE biochemical TR-FRET assays are sensitive, homogeneous, and easy to use.

Find the perfect match for your lab and budget

With a variety of configurations and optional extras available, there's a VICTOR Nivo system that's just right for you – whatever your lab's requirements or budget.

The system is available in two configurations: The standard model incorporates absorbance, luminescence, and fluorescence intensity detection technologies, while the advanced version also includes time-resolved fluorescence and fluorescence polarization capabilities.

Modalities	VICTOR Nivo 3F/3S	VICTOR Nivo 5F/5S	Standard Features	Optional Extras
Absorbance; Filter-based (F) or Spectrometer (S)	•	•	Top and bottom detection of all technologies for plate formats up to 1,536-wells	Dispenser (dual injectors) Gas control (CO ₂ and O ₂) 15-in. laptop or 12-in. tablet MyAssays Desktop Pro analysis software Test plate for alignment and system check
Luminescence	•	•	Temperature control up to 65°C	
Fluorescence Intensity	•	•	Shaker with three modes (linear, orbital, and double orbital)	
Time-resolved Fluorescence		•	Browser-based control software Wi-Fi modem for remote control	
Fluorescence Polarization		•	MyAssays Desktop Standard analysis software	

Everything you need to move your research forward

As an industry leader with a long history of instrument and assay development, we understand your science and your operational needs. We combine our expertise with a broad portfolio of reagents, microplates, and proprietary assay technologies, delivering a complete solution that gives optimal performance in the application areas you rely on most.

Assays and reagents for virtually any application

Our broad range of innovative reagents and assays include LANCE TR-FRET and DELFIA TRF, and our 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, available in different formats, such as half-area 96-, 96-, 384-, and shallow-volume 384-well plates, and in a variety of colors to suit your assay requirements.



Count on Our Support

Our expert service and support teams, comprising dedicated lab- and field-based applications specialists, can work with you to help overcome the challenges your application might bring.

What's more, PerkinElmer OneSource® Laboratory Services leverages deep scientific knowledge and expertise in the development of the most comprehensive suite of scientific laboratory services – from instrument maintenance and enterprise solutions to scientific consulting services – to optimize laboratory efficiency and deliver on business outcomes you're striving toward. Learn more www.perkinelmer.com/onesource.

Learn more at www.perkinelmer.com/nivo

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