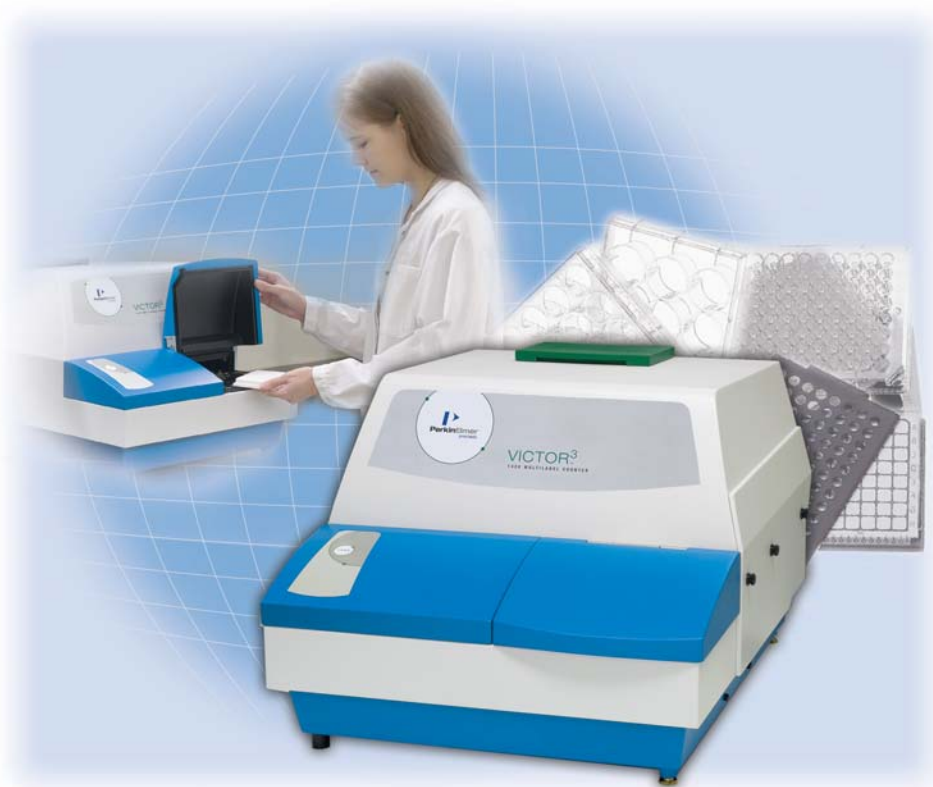


VICTOR³ and VICTOR³ V

Multilabel Readers



Versatility meets **Value**

Discover the Power of the Scalable VICTOR³

VICTOR³ handles all your research whatever your label

More formats. More detection technologies. More applications. The reliable, easy-to-use VICTOR³™ Multilabel Reader from PerkinElmer delivers a complete benchtop counting solution, at a remarkable value. Plus, with its unique **scalable** technology, the innovative VICTOR³ can grow as your needs grow—that's the power to meet all your assay needs—today and tomorrow!

Handles All Leading Non-Radiometric Detection Technologies

- Fluorescence (top and bottom)
- Luminescence (flash and glow)
- Absorbance
- Fluorescence polarization
- Time-resolved fluorescence (TRF)

Loaded with Standard Features

- Temperature control (up to +45 °C)
- Shaker with adjustable pattern, speed and radius
- Area scanning up to 100 points/well
- Kinetic measurements
- Dual label measurements
- Bottom reading for fluorescence intensity
- Adjustable measurement height

Scalable Technology

- Add counting modes and accessories as your research needs grow.
- Optional excitation and emission filters expand measurement capability for increased assay flexibility.

Tremendous Application Flexibility

- Accepts all types of microplates from 6- to 1536-wells.
 - Clear or opaque, black or white, filterplates, membranes, Petri dishes, slides, filters, Terasaki plates, and PCR plates are all accepted.
 - Any non-standard configuration can be defined using the instrument's Windows® Workstation software.
 - Load plates manually or using optional 20- or 40-plate stackers.
- Adjusts to your throughput needs.
- Runs stand-alone or integrated into your robotics system through the OLE interface of its Workstation software.
- Dispenser option for automated reagent dispensing.
- Optional 20- or 40-plate stackers for automated loading and continuous counting.
- Upgradeable as your needs change.
- Workstation software is designed to utilize the full capabilities of Windows® XP and Windows® 2000.



applications— whatever your assay

Wide Choice of Factory Installable Options

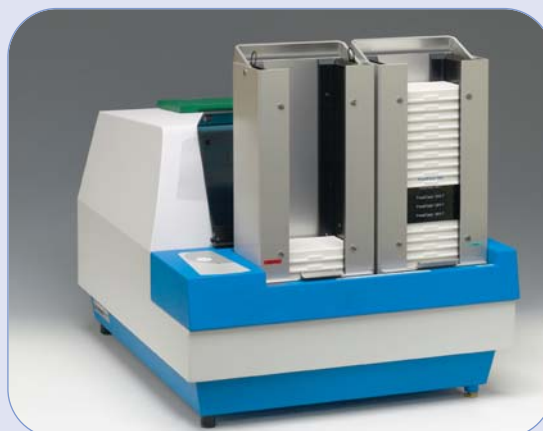
- **Dispensers**
 - Up to 4 injectors
 - Dispensing up to 96-well plate with 4 channels (same well)
 - Dispensing with 1 injector unit up to 384-well plate
- **Bar code reader**
- **Red sensitive PMT** that expands the wavelength range to infrared (up to 850 nm). Among other red shifted labels the feature is beneficial when the LANCE performance needs to be improved. Included as standard in models 1420-040 and 1420-041.

Powerful Software Options

- **21 CFR Part 11 compatible Windows® Workstation software** with Enhanced Security Option for improved access control, database security and audit trails
- **WorkOut2 Data Analysis Software** for assay design and results handling of both endpoint and kinetic assays. Included as standard in models 1420-012, 1420-015, 1420-040, 1420-041, 1420-050, and 1420-051.

VICTOR³ and VICTOR³ V Multilabel Readers

With VICTOR³, you choose the detection technologies and options you need now and upgrade as your needs change. You can select from a basic fluorescence and luminescence model, to the fully-loaded VICTOR³ V. Most upgrades can be done right in your lab!



More than 10 counting modes are available at any time:

- Fluorescence (top and bottom)
- Time-resolved fluorescence
- Fluorescence polarization
- Dual-window time-resolved fluorescence
- Luminescence (glow, flash or dual type)
- Absorbance (UV and visible)
- Fluorescence Resonance Energy Transfer (FRET)
- Dual excitation and emission fluorescence
- Scanning of the well area
- Fast and slow kinetic measurements

Easy to learn and use—

so you have more time for science

To measure your assay with VICTOR³, simply load the plate, select a protocol, and start the measurement. VICTOR³ is a flexible and easy-to-use system providing access to countless advanced features, all of which are made available through the user software. Details of the plates, filters and labels you use are all pre-installed on VICTOR³. It switches from one measuring mode to the next without any physical adjustments or time delay. There is no programming or set-up to consume your valuable time.

With Windows® Workstation software...

Designed to fully support Windows® XP and Windows® 2000, WorkStation software now offers an optional Enhanced Security Mode for laboratories operating under GMP, GLP or GCP. The **21 CFR Part 11** compatible WorkStation software provides instrument control, data security and audit logs functionality.

- **Instrument Access Control:** Supports User ID and password authentication. User manager allows set up of user groups with varying rights for individual users.
- **Data Security:** Protocol and result database can be accessed only by VICTOR³ software.
- **Audit Logs:** Creates an audit trail of all instrument logins, protocol changes and other user actions. Time stamp and user name are included to all loggings.

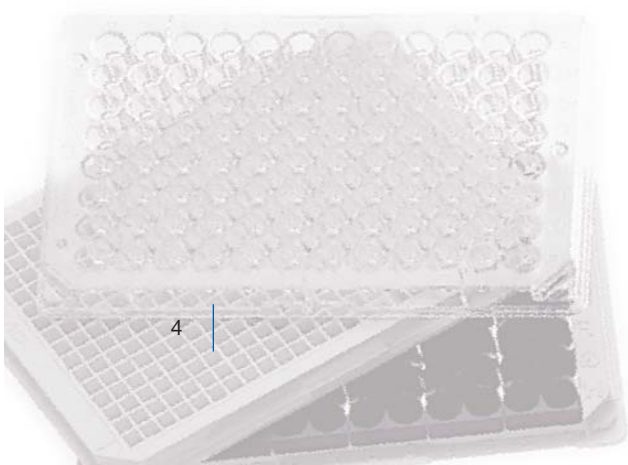
The instrument's **HELP** function is part of the versatile Windows® Workstation package. You can click on pictorial “hot spots” to obtain more information about any feature of the counter. There is also an extremely comprehensive search function that allows you rapid access to specific information.

Factory set protocols cover labels, plates and filters, and there is a **PROTOCOL EXPLORER** for quick access and editing of protocols. With ready-prepared protocols there is no need for manual tuning. However there are limitless opportunities to create your own application-specific protocols.

After measuring your plate, VICTOR³ automatically transfers results to Microsoft® Excel, MultiCalc® or any other analysis software that can import data in .txt or .xls format. Or you can manage both assay design and results analysis using the instrument's optional WorkOut data analysis software.

... and WorkOut data analysis software— *ideal for both endpoint and kinetics assays*

With endpoint and kinetic assays, PerkinElmer's WorkOut2 software provides a flexible and easy-to-use tool for assay design and result handling. Designed for Windows® XP and Windows® 2000, it includes powerful features such as context sensitive help, and the ability to work with multiple documents at once. There is a wide range of curve fitting methods and kinetics reduction methods. It works online with the VICTOR providing real-time kinetics display and graphical data export to Excel and Word. You can also visualize your result report with special 3-D viewing and other graphics options.



A versatile counting solution

for all kinds of assays

The VICTOR³ is an ideal counting solution for a wide range of *cell-based assays*.

VICTOR³ offers special functions such as scanning, top and bottom measurement, temperature control and dispensing capabilities. All these make VICTOR³ a true platform for many cell applications.

In both **slow and fast kinetic assays**, VICTOR³ allows faithful reproduction of physical conditions. Delays and repeats can be specified by plate, row or well.

Binding assays, using platforms such as PerkinElmer's DELFIA®, are easily handled with VICTOR's flexible features. DELFIA employs time-resolved fluorescence (TRF) technology, which is based on the unique fluorescence properties of lanthanide chelates. The high sensitivity and wide dynamic range of DELFIA assays provide excellent performance for many binding applications.

VICTOR³ features make this instrument ideal for a wide range of cell biology applications, molecular biology applications, binding studies, environmental and food testing, toxicology and drug screening, and much more. Detailed application and reference information is available at www.perkinelmer.com.



VICTOR³ comes standard with excitation and emission filters to cover the full range of wavelengths used in fluorescence and absorbance applications.

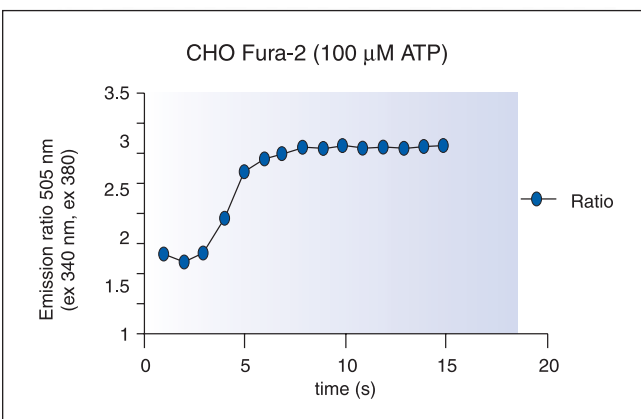
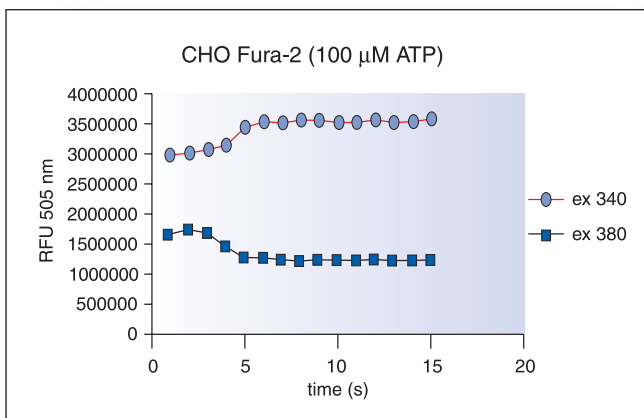
VICTOR³ enables fast multi-wavelength assays in microplates

A limitation of cell-based fluorescent assays in microplates is the necessity of using single wavelength light sources. In many cases, much more information could be gathered through the use of ratiometric indicators or multiple probes in one experiment. For assay development or secondary screening, the information content of the assay is as valuable as absolute speed. All VICTOR³ counters are capable of pharmacological measurements on end-point type influx experiments such as NMDA receptors or voltage gated Ca²⁺ channels. Injector-equipped VICTOR³ models will do sub-second resolution single wavelength dye pharmacology for GPCRs. VICTOR³ does multi-wavelength and/or ratiometric Ca²⁺ analysis with sub-second time resolution and integral addition of effectors.



Examples of VICTOR³ assays and applications

- | | |
|---|--|
| Agglutination | Intracellular Ca ²⁺ measurement, Fura-2, dual-label ratiometric and kinetic |
| Apoptosis | |
| Bacterial adhesion | |
| Bacterial identification | Kinase activity |
| Blue fluorescent protein | LANCE |
| BRET ^{2™} | Macrophage activity |
| Cell adhesion | Metabolic activity |
| Cell counting | MIC (minimum inhibitory concentration) |
| Cell expression | Mitochondrial membrane potential |
| Cell membrane integrity and lysis | Multiprobe assays |
| Cell proliferation | NADH, NADPH |
| Cell viability and cytotoxicity | Na ⁺ /H ⁺ exchange |
| Chemotaxis | NK cell activity |
| Chlorophyll | Nucleic acid quantification |
| Colorimetric assays | Oxidative burst |
| Cytokine analysis | Oxidation reactions |
| Cytotoxicity | PCR product (quantitative and qualitative) |
| DELFI, preferably bRDU assay | pH indicators |
| DNA hybridization | Phagocytosis |
| DNA quantification (fluorescence and UV absorbance) | Phospholipid assay |
| ELISA/FELISA | PKU |
| Endocrine hormones | Protease activity |
| Enzyme activity | Protein assays quantification |
| Enzymatic cleavage | Receptor binding studies |
| Enzyme kinetics | Reporter gene |
| Environmental toxins | Reverse transcriptase |
| FIA | RNA hybridization |
| Gene expression | RNA quantification |
| Green fluorescent protein GFP | Signal transduction |
| HTS | SNP (Single Nucleotide Polymorphisms) |
| Homogeneous TRF (LANCE™) | Steroid hormones |
| Immunoassays | Toxicology |
| | Uranium |



Calcium response following addition of ATP to cultured cells: Chinese hamster ovary cells were challenged with the purinergic agonist ATP, introduced using the VICTOR³ injector. Dual wavelength measurements alternating between 340 and 380 nm every 0.5 seconds provides a ratiometric index of intracellular Ca²⁺ activity, enabling real comparison between different experiments, cell types, etc. The fast filter changer capability of the VICTOR³ enables the use of several dyes monitoring different cellular functions for each experiment.

The VICTOR³ family meets all your research needs

	Fluorescence (top & bottom)	Luminescence	Visible Absorbance	UV Absorbance	Time-Resolved Fluorescence	Fluorescence Polarization	Stacker	WorkOut2
VICTOR ³ 1420-032	X	X						
VICTOR ³ 1420-050	X	X	X	X				X
VICTOR ³ 1420-012	X	X	X	X	X			X
VICTOR ³ 1420-033	X	X					X	
VICTOR ³ 1420-051	X	X	X	X			X	X
VICTOR ³ 1420-015	X	X	X	X	X		X	X
VICTOR ³ V* 1420-040	X	X	X	X	X	X		X
VICTOR ³ V* 1420-041	X	X	X	X	X	X	X	X

* Both VICTOR³ V models also include red sensitive PMT as standard.

Standard Features

- Bottom reading for fluorescence
- Dual label reading
- Kinetics reading
- Temperature control
- Scanning
- Shaking
- Easy-to-use software with robotic interface

Plates

6-, 12-, 24-, 48-, 96-, 384-, 864- and 1536-well microplates (outer dimensions 86 mm x 128 mm, height 3-25 mm). Petri dishes, slides, filters, Terasaki plates, PCR plates, or customized plate formats can be measured with adapters.

Performance

FLUORESCENCE DETECTION (200 µL, 96-well black plate)	Fluorescein: linearity: crosstalk: Umbelliferone: Rhodamine:	typically < 2 fmol / well, 10 pM > 5 decades < 0.01 % typically < 200 fmol / well, 1 nM typically < 100 fmol / well, 0.5 nM
TR-FLUORESCENCE DETECTION (200 µL, 96-well clear plate)	Europium: linearity: crosstalk: Terbium: Samarium: Dysprosium:	typically < 10 amol / well, 50 fM > 5 decades < 0.01 % typically < 5 amol / well, 25 fM typically < 50 amol / well, 250 fM typically < 150 amol / well, 750 fM
LUMINESCENCE DETECTION (96-well plate)	Lower limit of detection (LLD): ALP: ATP: Luciferase:	total flux of 20,000 photons / s (standard PMT) 100,000 photons / s (red sensitive PMT) typically 1 amol / well with AMPPD substrate typically 80 amol / well in flash assays 0.9 pg / well using brite lite
ABSORBANCE DETECTION (96-well plate)	Measuring range @ 405 nm: Accuracy @ 405 nm: Precision @ 405 nm:	0 - 4 A < 2 % (or 0.01 A) within 0 - 2 A < 0.5 % (or 0.01 A) within 0 - 2 A
FLUORESCENCE POLARIZATION (384-well black plate)	Fluorescein: Standard deviation:	1 nM, 40 µL < 5 mP

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

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