



Cell analysis

# Microplate instruments, assays, and accessories guide

Everything you need for your microplate assays

# A one-stop solution for your microplate needs

Whether you are conducting fluorescence, luminescence, or colorimetric studies, our high-quality microplates, microplate readers, and assays work together to deliver reliable, accurate results—quickly—so you can focus on your research.



## **Thermo Scientific™ Nunc™ cell culture plates**

Choose from a wide selection of surface modifications and formats for a variety of 2D and 3D cell-based assays.

## **Thermo Scientific™ Nunc™ black and white polystyrene plates**

Get optimal performance with minimal background and crosstalk between wells for maximal signal detection.

## **Thermo Scientific™ Nunc™ Edge™ plates**

Minimize evaporation concerns for live-cell assays with long incubations.

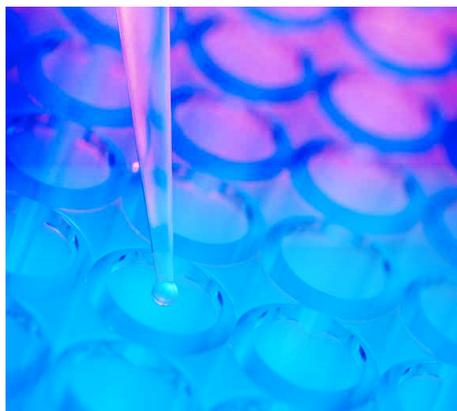
To find the Nunc plate that best suits your needs, go to [thermofisher.com/cellcultureplates](https://www.thermofisher.com/cellcultureplates)

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# Cell health and imaging assays



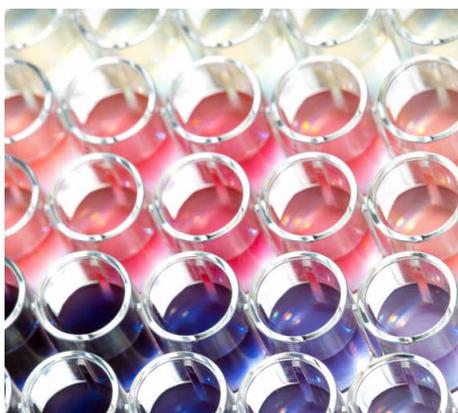
## Fluorescence microplate assays

Combining the sensitivity of a fluorescence-based assay with a microplate format enables a rapid, quantitative readout that is suitable for high-throughput analysis. We offer a diverse selection of probes and assays for the analysis of cell viability, proliferation, cytotoxicity, apoptosis, ion flux, generation of reactive oxygen species, nucleic acid and protein quantitation, and various enzymatic activities. In a microplate well, the fluorescent signal can be generated within whole cells, in cell lysates, or in purified enzyme or DNA/RNA preparations. Fluorescence intensity can be measured from the well without the need for cellular imaging. Additionally, these products have been verified on multiple instrument platforms, including microplate readers.

For more information, go to [thermofisher.com/microplate-fluor-assays](https://www.thermofisher.com/microplate-fluor-assays)

## Choose from our comprehensive portfolio of Invitrogen™ microplate assays for cell health and imaging.

Application	Fluorescence assay
Apoptosis and autophagy	<ul style="list-style-type: none"> <li>• CellEvent Caspase-3/7 Detection Reagents (Cat. No. C10723, C10430, C10432)</li> <li>• EnzChek Caspase-3 Assay Kit #1, Z-DEVD-AMC Substrate (Cat. No. E13183)</li> <li>• EnzChek Caspase-3 Assay Kit #2, Z-DEVD-R110 Substrate (Cat. No. E13184)</li> <li>• Premo Autophagy Sensors (Cat. No. P36235, P36236, P36239)</li> </ul>
Calcium ion indicators	<ul style="list-style-type: none"> <li>• Fluo-3, AM, Calcium Indicator (Cat. No. F1242)</li> <li>• Fluo-4 Direct Calcium Assay Kit (Cat. No. F10471)</li> <li>• Fluo-4 NW Calcium Assay Kit (Cat. No. F36206)</li> </ul>
Metabolic (cholesterol)	<ul style="list-style-type: none"> <li>• Amplex Red Cholesterol Assay Kit (Cat. No. A12216)</li> </ul>
Metabolic (glucose)	<ul style="list-style-type: none"> <li>• Amplex Red Glucose/Glucose Oxidase Assay Kit (Cat. No. A22189)</li> </ul>
Proliferation	<p><b>DNA content measurement</b></p> <ul style="list-style-type: none"> <li>• CyQUANT Cell Proliferation Assay Kit (Cat. No. C7026)</li> <li>• CyQUANT NF Cell Proliferation Assay Kit (Cat. No. C35006)</li> <li>• CyQUANT Direct Cell Proliferation Assay Kit (Cat. No. C35011, C35012)</li> </ul> <p><b>New DNA synthesis</b></p> <ul style="list-style-type: none"> <li>• Click-iT EdU Alexa Fluor 488 HCS Assay (Cat. No. C10350)</li> <li>• Click-iT EdU Alexa Fluor 555 HCS Assay (Cat. No. C10352)</li> <li>• Click-iT EdU Alexa Fluor 594 HCS Assay (Cat. No. C10354)</li> <li>• Click-iT EdU Alexa Fluor 647 HCS Assay (Cat. No. C10356)</li> <li>• Click-iT EdU Proliferation Assay for Microplates (Cat. No. C10499)</li> </ul>
Protein	<ul style="list-style-type: none"> <li>• Quant-iT Protein Assay Kit (Cat. No. Q33210)</li> </ul>
Endotoxin	<ul style="list-style-type: none"> <li>• Quant-iT Endotoxin Detection Assay Kit (Cat. No. Q32892)</li> </ul>
Reactive oxygen species	<ul style="list-style-type: none"> <li>• CellROX Green Reagent (Cat. No. C10444)</li> <li>• CellROX Deep Red Reagent (Cat. No. C10422)</li> </ul>
RNA	<ul style="list-style-type: none"> <li>• Quant-iT RiboGreen RNA Assay Kit (Cat. No. R11490)</li> <li>• Quant-iT RiboGreen RNA Reagent (Cat. No. R11491)</li> </ul>
ssDNA	<ul style="list-style-type: none"> <li>• Quant-iT OliGreen ssDNA Reagent (Cat. No. O7582)</li> <li>• Quant-iT OliGreen ssDNA Assay Kit (Cat. No. O11492)</li> </ul>
dsDNA	<ul style="list-style-type: none"> <li>• Quant-iT PicoGreen dsDNA Assay Kit (Cat. No. P7589, P11496)</li> <li>• Quant-iT PicoGreen dsDNA Reagent (Cat. No. P7581, P11495)</li> <li>• Quant-iT dsDNA Assay Kit, High Sensitivity (Cat. No. Q33120)</li> <li>• Quant-iT dsDNA Assay Kit, Broad Range (Cat. No. Q33130)</li> </ul>
Viability	<ul style="list-style-type: none"> <li>• alamarBlue Cell Viability Reagent (Cat. No. DAL1025, DAL1100)</li> <li>• PrestoBlue Cell Viability Reagent (Cat. No. A13261, A13262)</li> <li>• LIVE/DEAD Viability/Cytotoxicity Kit (Cat. No. L3224)</li> <li>• PrestoBlue HS Cell Viability Reagent (Cat. No. P50200)</li> </ul>



### Absorbance microplate assays

For more than 30 years, absorbance-based detection has been the preferred choice for many microplate-based assays, such as ELISA and protein assays, nucleic acid quantitation, and enzymatic assays. A light source illuminates a sample, and a light detector measures how much of the initial light is transmitted through the sample. Many absorbance assays use a chromogenic substrate, which is enzymatically converted to a product that will absorb light at a specific wavelength. Absorbance assays are popular because of their ease of use, cost-effectiveness, and exceptional well-to-well reproducibility. Additionally, the color change associated with an absorbance assay can help confirm the progression of an enzymatic reaction.

For more information, go to [thermofisher.com/elisa](https://www.thermofisher.com/elisa), [thermofisher.com/cytotoxicity](https://www.thermofisher.com/cytotoxicity), or [thermofisher.com/microplate-cell-viability](https://www.thermofisher.com/microplate-cell-viability)

### Choose from our portfolio of reliable Invitrogen™ absorbance microplate assays.

Application	Absorbance assay
Cytotoxicity	• CyQUANT LDH Cytotoxicity Assay (Cat. No. C20300, C20301)
	• CyQUANT Cytotoxicity Assay Kit (G6PD Release Assay) (Cat. No. V23111)
Viability	• CyQUANT XTT Cell Viability Assay (Cat. No. X12223)
	• CyQUANT MTT Cell Viability Assay (Cat. No. V13154)



### Luminescence microplate assays

Luminescence microplate assays utilize a biochemical or chemical reaction to generate photons that are detected by a photomultiplier tube (PMT) or charge-coupled device (CCD) in the plate reader. Typically, the full spectrum of signals from luminescence assays is collected, and measurement is not restricted to particular wavelengths. Luminescence assays are popular because of their sensitivity and the large dynamic ranges.

For more information, go to [thermofisher.com/luciferase](https://www.thermofisher.com/luciferase)

### Choose from our portfolio of Thermo Scientific™ luminescence microplate assays.

Application	Luminescence assay
Reporter gene (firefly)	• Pierce Firefly Luc One-Step Glow Assay Kit (Cat. No. 16196, 16197)
	• Pierce Firefly Luciferase Flash Assay Kit (Cat. No. 16174, 16175)
Reporter gene ( <i>Renilla</i> )	• Pierce <i>Renilla</i> Luciferase Glow Assay Kit (Cat. No. 16166, 16167)
	• Pierce <i>Renilla</i> Luciferase Flash Assay Kit (Cat. No. 16164, 16165)
Reporter gene ( <i>Gaussia</i> )	• Pierce <i>Gaussia</i> Luciferase Flash Assay Kit (Cat. No. 16158, 16159)

# Microplate readers

Thermo Scientific™ microplate readers provide flexibility, performance, and ease of use for a variety of assays. Whether you need to measure fluorescence, absorbance, luminescence, or time-resolved fluorescence (TRF) or perform AlphaScreen™ assays, we offer a microplate reader to meet the requirements of your specific workflow. With a portfolio of dedicated modular and upgradable multimode readers, we also have solutions that fit your current budget with options to help meet the needs of your laboratory.

Thermo Scientific microplate readers have a number of features to help you save time and maximize productivity, including:

- Auto-calibration
- Easy export to Microsoft™ Excel™ format
- Automation readiness with robot compatibility
- No limit to the number of computers on which you can install Thermo Scientific™ SkanIt™ Software
- Ready-to-use protocols available in an extensive online protocol library

For more information, go to [thermofisher.com/platereaders](https://www.thermofisher.com/platereaders)

## Skant Software

The intuitive interface of updated SkanIt Software can guide you through the measurement process to help you get the results you need. SkanIt Software is available in two editions. The Research Edition is for scientists working in life sciences research, and the Drug Discovery Edition provides features to help you comply with the requirements of FDA 21 CFR Part 11.

## Skant Software makes microplate reading easy

SkanIt Software provides excellent usability and flexibility, even for the most challenging microplate assays. This software offers visual workflow setup and effortless data reduction and exporting.

- Capable of endpoint, kinetic, spectral scanning, bottom-reading with a multipoint option, and kinetic-spectral measurements
- Extensive SkanIt Cloud Library of ready-made protocols is available
- Intuitive user interface simplifies measurement setup
- Virtual pipette tool makes it easy to define sample-to-plate layout
- Built-in calculations for fast, accurate data analysis, including:
  - Parallel line analysis
  - Enzyme kinetics ( $K_m$  and  $V_{max}$ )
  - Z-factor
  - Linear and logistic curve fitting with extrapolation
  - And many more
- Single-click data export to Excel software
- Manually or automatically export data to .xlsx, .pdf, .xml, and .txt file formats
- Open-license software allows unlimited installation on multiple computers
- No annual fee to use the software

For more information, go to [thermofisher.com/skanit](https://www.thermofisher.com/skanit)



Consideration	Multiskan FC photometer	Multiskan SkyHigh spectrophotometer	Varioskan ALF multimode reader	Varioskan LUX multimode reader
<b>Applications</b>	Absorbance, turbidimetry		Absorbance, turbidimetry, luminescence, fluorescence	Absorbance, turbidimetry, fluorescence Optional: TRF, luminescence, AlphaScreen assays
<b>Wavelength range</b>	340–850 nm	200–1,000 nm	Absorbance: 200–1,000 nm Excitation: 200–750 nm Emission: 210–760 nm	Absorbance: 200–1,000 nm Fluorescence excitation: 200–1,000 nm** Fluorescence emission: 270–840 nm Luminescence: 360–670 nm (spectral scanning 270–840 nm) TRF excitation: fixed to 334 nm (spectral scanning 200–840 nm) TRF emission: 400–670 nm (spectral scanning 270–840 nm) AlphaScreen assay excitation: fixed to 680 nm AlphaScreen assay emission: 400–660 nm
<b>Wavelength selection</b>	Filters	Monochromator	Monochromator for UV/Vis absorbance Filters for fluorescence intensity Filters for luminescence (when necessary)	Monochromator for UV/Vis absorbance and fluorescence intensity Filters for luminescence (when necessary), TRF, AlphaScreen assays
<b>Plate format</b>	96 wells (384 wells optional)	$\mu$ Drop and $\mu$ Drop Duo plates, 6- to 48-well plates,* 96- and 384-well plates	$\mu$ Drop and $\mu$ Drop Duo plates, 6- to 384-well plates	6–1,536 wells (fluorescence, TRF, luminescence, AlphaScreen assays) $\mu$ Drop and $\mu$ Drop Duo Plates, 6–384 wells (absorbance)
<b>Incubation</b>	Optional	Yes	Yes	Yes
<b>Shaking</b>	Yes	Yes	Yes	Yes
<b>Reagent dispensers</b>	No	No	No	Optional (up to two)
<b>Top/bottom reading</b>	NA	NA	Top	Top (standard), bottom (optional) <sup>†</sup>
<b>Cuvettes</b>	No	Optional	No	With $\mu$ Drop plate
<b>Gas control module</b>	No	No	No	Optional
<b>Robot compatibility</b>	Yes	Yes	Yes	Yes
<b>21 CFR Part 11 compliance capabilities</b>	Yes	Yes	Yes	Yes

\* Maximum plate height with lid is 19.5 mm.

\*\* Emission wavelength must be greater than excitation wavelength.

<sup>†</sup> Instruments with bottom-reading capabilities feature multiple read locations per well.

### Wellwash Versa Microplate Washer

Wash 96- or 384-well plates securely with the Thermo Scientific™ Wellwash™ Versa Microplate Washer, an automation-ready microplate strip washer for routine ELISA applications. Designed for high performance and versatility, the Wellwash microplate washer is easy to use and convenient with a graphical interface, local language versions, and USB port.



See more at [thermofisher.com/wellwash](http://thermofisher.com/wellwash)

## A range of microplate readers to enable maximum flexibility and performance

### To measure absorbance

#### Thermo Scientific™ Multiskan™ FC Microplate Photometer

A robust and reliable filter-based instrument that can be used for a wide variety of research applications. It can be used as a stand-alone instrument or under PC control with intuitive SkanIt Software.



- Use for a wide variety of applications, including ELISA, endotoxin assays, cytotoxicity assays, and growth curves
- Shake and incubate at up to 50°C for temperature-sensitive assays
- Trusted performance and reliable day-to-day results through optical design and self-diagnostics

[thermofisher.com/multiskanfc](https://thermofisher.com/multiskanfc)

#### Thermo Scientific™ Multiskan™ SkyHigh Microplate Spectrophotometer

The Multiskan SkyHigh Microplate Spectrophotometer is easy to use for any photometric or turbidimetric research application, particularly nucleic acid and protein analysis. It offers an optional, easy-to-use graphic touchscreen and multiple connectivity options (USB, computer, or cloud). Key highlights:



- Allows kinetic, spectral, and endpoint measurements for a variety of applications
- Separate optimized measurement modes for absorbance and turbidimetric measurements
- Fast reading speed that is essential for kinetic applications
- Available in three different configurations: 1) touchscreen, 2) cuvette and touchscreen, and 3) operated only with SkanIt Software (PC)
- Reads Thermo Scientific™  $\mu$ Drop™ and  $\mu$ Drop™ Duo plates for microvolume analysis of DNA, RNA, and protein
- Models with touchscreens have an easy-to-use interface for stand-alone use and include ready-made protocols for UV-based nucleic acid and protein quantitation as well as colorimetric protein quantitation
- Fast operation: full spectrum (200–1,000 nm) of a sample well is obtained in less than 10 seconds, and a full 96-well microplate is read in 6 seconds
- Access to the Thermo Fisher™ Connect Platform or Microsoft™ OneDrive™ cloud-based tools allows you to securely store, access, share, and manage data remotely (touchscreen models)

[thermofisher.com/multiskanskyhigh](https://thermofisher.com/multiskanskyhigh)

### For multimode readouts

#### Thermo Scientific™ Varioskan™ ALF Multimode Microplate Reader

A versatile, entry-level multimode microplate reader for a variety of UV/Vis absorbance, fluorescence, and luminescence microplate assays. In addition to being fast, flexible, and easy to use, the Varioskan ALF multimode reader also features:



- Multiple detection modes: absorbance, turbidimetry, luminescence, and fluorescence
- Top reading to enable basic microplate reader applications, including nucleic acid and protein quantitation, bacterial growth curves, ELISA, and cell viability
- Versatile plate types, including 6- to 384-well plates and  $\mu$ Drop plates
- Linear, orbital, and double orbital shaking
- Incubation at ambient temperatures from 2°C to 45°C
- User interface with intuitive SkanIt Software to simplify and speed up assay setup and data analysis and transfer, offering a visual workflow and the most ready-to-use microplate reader protocols available
- A plug-and-play solution that gives you full control of your microplate reader assays

[thermofisher.com/varioskanalf](https://thermofisher.com/varioskanalf)

#### Thermo Scientific™ Varioskan™ LUX Multimode Microplate Reader

Designed to suit a wide variety of needs, the Varioskan LUX Multimode Microplate Reader has a flexible range of measurement modes. The instrument simplifies measurement setup with automatic dynamic range selection, and its smart safety controls help you avoid experimental errors. The Varioskan LUX multimode reader raises the bar for reliability and ease, and features:



- Five detection modes: absorbance, fluorescence, luminescence, TRF, and AlphaScreen modules
- Five measurement modes: endpoint, kinetic, spectral, multipoint, and kinetic-spectral
- Spectral scanning with 1 nm increments for assay scanning
- Simultaneous dispensing and measurement of fast reactions right from the start
- Integrated gas module for control of CO<sub>2</sub> and O<sub>2</sub>
- Wavelength selection with:
  - Monochromators for absorbance and fluorescence intensity
  - Filters for AlphaScreen assays and TRF
  - Luminescence without wavelength selection or optionally with filters

[thermofisher.com/varioskanlux](https://thermofisher.com/varioskanlux)

# ELISA platforms

ELISAs are popular for protein quantitation because of their ease of use and the rapid and consistent results they provide. Our ELISA kits are developed to meet industry-standard specifications for standard calibration, precision, sensitivity, specificity, recovery, lot-to-lot consistency, linearity, and parallelism.

Find out more about our testing standards at

[thermofisher.com/elisastandards](https://thermofisher.com/elisastandards)



Rigorous assay verification of ELISA kits helps ensure consistent, reliable results.

Specification	Description	What does it mean for you?
<b>Standard calibration</b>	Calibrated to National Institute for Biological Standards and Control (NIBSC) standards (if available)	Allows accurate quantitation and consistent standard of reference across multiple platforms
<b>Precision</b>	Average inter-assay CV of <10% Average intra-assay CV of <10%	Obtain consistent results
<b>Sensitivity</b>	Relevant levels of protein are detected for specific assay type	Enables detection of low levels of protein
<b>Specificity</b>	Cross-reactivity tests are performed with similar analytes	Helps to ensure accurate measurement of the protein of interest
<b>Recovery</b>	Buffers are optimized to minimize matrix effects	Helps to ensure accurate quantitation of samples within complex matrices, including serum and plasma
<b>Lot-to-lot consistency</b>	In-house controls are tested to evaluate whether the data are within set ranges	Helps to ensure consistent results with new lots
<b>Linearity of dilution</b>	Linear results over the quantitative range of the assay	Serial dilutions of samples are quantitated accurately
<b>Parallelism</b>	Recombinant protein standards mimic native proteins	Samples can be measured with confidence

Choose from a variety of Invitrogen™ ELISA kits, including complete, ready-to-use kits and preoptimized reagents to make your own assay.

Verified, ready-to-use kits	Measure phosphospecific proteins	Reduce steps and hands-on time	Coat it yourself and keep costs low
			
Invitrogen™ coated ELISA kits	Invitrogen™ phosphospecific coated ELISA kits	Invitrogen™ Instant ELISA™ kits	Invitrogen™ uncoated ELISA kits
Highly verified ELISA kits with precoated plates provide lower inter- and intra-assay variability with ready-to-use reagents to help ensure consistent data.	Designed to deliver accurate, sensitive, and fast quantitation of total, phosphorylated, modified, or cleavage site-specific proteins in a broad range of sample types.	Simply add sample to perform 1-wash, 1-hour ELISA. These kits come with most assay components already added and lyophilized in the bottom of the 96-well plate.	These kits include all reagents required to prepare and run the ELISA, including ELISA-optimized matched antibody pairs, standards, detection reagents, coating buffers, sample diluent, and substrate solution.

Try our enhanced search tool at [thermofisher.com/elisa](https://thermofisher.com/elisa)

# Colorimetric and fluorometric protein and peptide assays

We offer numerous colorimetric assays for detection and quantitation of total protein that can be utilized in both tube and microplate formats. Thermo Scientific™ Pierce™ protein assays provide exceptional accuracy, compatibility, and broad applicability that enable most laboratory protein samples to be detected with ease. We also offer easy-to-use colorimetric and fluorescent peptide assays that are designed specifically to improve the sensitivity and reproducibility of peptide mixture quantitation.



## Highlights:

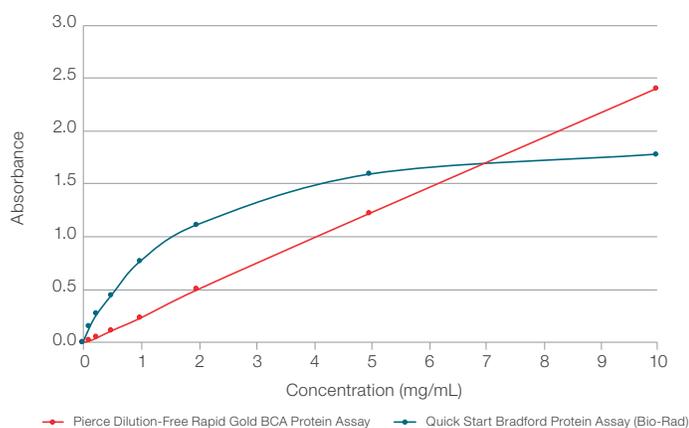
- **Wide selection**—multiple assays to choose from based on your sample's composition
- **Simple format**—many assays are in mix-and-read format; others have a short incubation time
- **Minimal sample requirement**—most assays require only 10  $\mu$ L of sample in microplate format

## Working ranges for Thermo Scientific™ protein and peptide assays.

Reagent	Protocol	Assay incubation time (min)	Working range ( $\mu$ g/mL)
Pierce Dilution-Free Rapid Gold BCA Protein Assay	Standard tube or microplate	5	20–10,000
Pierce BCA Protein Assay Kit with Dilution-Free BSA Protein Standards	Standard tube or microplate	30	20–2,000
	Enhanced tube		5–250
Pierce Bradford Plus Protein Assay Kit with Dilution-Free BSA Protein Standards	Standard tube or microplate	10	100–1,500
	Micro protocol		1–25
Micro BCA Protein Assay	Standard tube	60	0.5–20
	Standard microplate		2–40
Pierce BCA Protein Assay—Reducing Agent Compatible	Standard tube or microplate	45	125–2,000
Pierce 660 nm Protein Assay	Standard tube	5	25–2,000
	Standard microplate		50–2,000
Pierce Detergent Compatible Bradford Assay	Standard tube or microplate	10	100–1,500
	Micro protocol		2–25
Pierce Bradford Protein Assay	Standard tube or microplate	10	100–1,500
	Micro protocol		1–25
Pierce Modified Lowry Protein Assay	Standard tube or microplate	10 and 30	1–1,500
Pierce Fluorometric Peptide Assay	Standard microplate	5	5–1,000
Pierce Colorimetric Peptide Assay	Standard microplate	15–30	25–1,000

## The accuracy of BCA and the speed of the Bradford protein assay

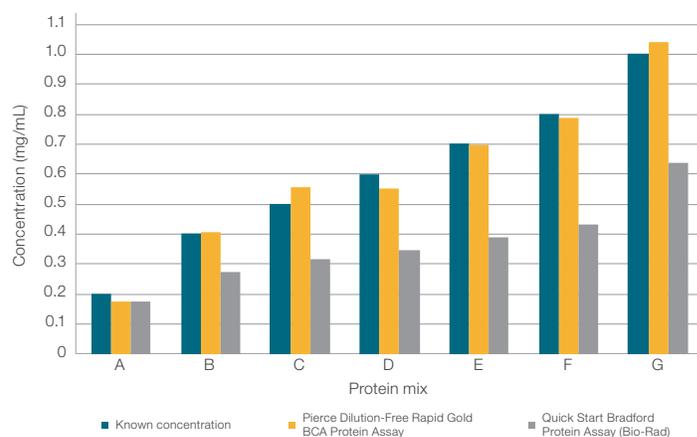
The Thermo Scientific™ Pierce™ Dilution-Free Rapid Gold BCA Protein Assay Kit is an effortless, fast, and accurate assay optimized for determination of total protein concentration. It is detergent compatible, and its dynamic range of 0.02–10 mg/mL is five times wider than that of traditional protein assays. This wide dynamic range eliminates the need to dilute most samples to get them into the range of the assay.



**Figure 1. The Pierce Dilution-Free Rapid Gold BCA Protein Assay generates a linear standard curve across a wide dynamic range.** Standard curves were produced for the Pierce Dilution-Free Rapid Gold BCA Protein Assay and the Bio-Rad™ Quick Start™ Bradford Protein Assay (Bio-Rad Cat. No. 5000201) with purified BSA in 0.9% saline (0–10 mg/mL). Both assays were conducted using the respective manufacturers' protocols in microplate format. Absorbance was read using the Varioskan LUX Multimode Microplate Reader.

## Highlights:

- **Dilution-free**—eliminates sample and standard curve dilutions
- **Fast**—assay results in 5 minutes at room temperature
- **Accurate**—twice the accuracy of Bradford assays
- **Flexible**—compatible with detergent



**Figure 2. Protein quantitation results from the Pierce Dilution-Free Rapid Gold BCA Protein Assay and the Quick Start Bradford Protein Assay.** Both assays were conducted in microplate format according to the respective manufacturers' protocols. For the Bradford assay, 5  $\mu$ L of sample was added to 250  $\mu$ L of the Bradford working reagent and incubated at room temperature for 5 minutes. For the Pierce BCA assay, 10  $\mu$ L of sample was added to 200  $\mu$ L of Pierce Dilution-Free Rapid Gold BCA working reagent and incubated at room temperature for 5 minutes. Known concentrations of protein samples were based on manufacturers' indicated concentrations and were confirmed by absorbance at 280 nm.



Download the protein assay technical handbook to help you select the appropriate assay method based on assay time, sensitivity, compatibility, standard curve linearity, and protein-to-protein variation. Learn about our wide range of copper- and dye-based colorimetric assays and fluorescent protein assays, as well as our more specialized assays to quantify peptides, antibodies, protein modifications, or functional (enzymatic) proteins. Discover tools and strategies to optimize your protein quantitation assays to help ensure more accurate downstream results.

Download the free handbook at [thermofisher.com/protein-assay-handbook](https://thermofisher.com/protein-assay-handbook)

To find out more, go to [thermofisher.com/proteinassays](https://thermofisher.com/proteinassays)

## Ordering information

Product	Quantity	Cat. No.
<b>Protein and peptide quantitation assays</b>		
Pierce Dilution-Free Rapid Gold BCA Protein Assay Kit	500 mL	A55860
Pierce 660 nm Protein Assay Kit	450 mL	22662
Pierce BCA Protein Assay Kit with Dilution-Free BSA Protein Standards	500 mL	A55865
Pierce BCA Protein Assay Kit—Reducing Agent Compatible	275 mL	23250
Pierce Dilution-Free BSA Protein Standards, multichannel pipette compatible	7 x 1 mL	A55863
Pierce Bovine Gamma Globulin Standard Ampules, Pre-Diluted Set	7 x 3.5 mL	23213
Pierce Bovine Serum Albumin Standard Pre-Diluted Set	7 x 3.5 mL	23208
Pierce Bradford Protein Assay Kit	950 mL	23200
Pierce Bradford Plus Protein Assay Kit with Dilution-Free BSA Protein Standards	950 mL	A55866
Pierce Detergent Compatible Bradford Assay Kit	450 mL	23246
Pierce Micro BCA Protein Assay Kit	500 mL	23235
Pierce Modified Lowry Protein Assay Kit	530 mL	23240
Pierce Quantitative Colorimetric Peptide Assay	500 assays	23275
Pierce Quantitative Fluorometric Peptide Assay	500 assays	23290
To view additional products, go to <a href="https://thermofisher.com/proteinassays">thermofisher.com/proteinassays</a>		
<b>ELISA kits</b>		
AKT (Phospho) [pS473] Human ELISA Kit	96 tests	KHO0111
AMPK Alpha-1,2 (Phospho) [pT172] Human ELISA Kit	96 tests	KHO0651
Alpha Synuclein Human ELISA Kit	96 tests	KHB0061
Amyloid Beta 40 Human ELISA Kit	96 tests	KHB3481
	192 tests	KHB3482
Amyloid Beta 42 Human ELISA Kit	96 tests	KHB3441
	192 tests	KHB3442
Amyloid Beta 42 Mouse ELISA Kit	96 tests	KMB3441
Amyloid Beta 42 Human ELISA Kit, Ultrasensitive	96 tests	KHB3544
CD27 (Soluble) Human Instant ELISA Kit	128 tests	BMS286INST
CREB (Phospho) [pS133] Human ELISA Kit	96 tests	KHO0241
c-Myc (Total) Human ELISA Kit	96 tests	KHO2041
EPO Receptor Human ELISA Kit	96 tests	EHEPOR

Product	Quantity	Cat. No.
FAK (Phospho) [pY397] Human ELISA Kit	96 tests	KHO0441
G-CSF Human Instant ELISA Kit	128 tests	BMS2001INST
IFN Alpha Mouse ELISA Kit	960 tests	BMS6027TEN
IFN Gamma Human ELISA Kit	480 tests	EHIFNG5
IFN Gamma Human ELISA Kit	480 tests	KHC4021C
IFN Gamma Human Uncoated ELISA Kit	960 tests	88-7316-88
IFN Gamma Human Uncoated ELISA Kit	1,920 tests	88-7316-77
IFN Gamma Mouse Uncoated ELISA Kit	960 tests	88-7314-88
IgG Subclass Human ELISA Kit	192 tests	991000
IL-1 Beta Human Instant ELISA Kit	128 tests	BMS224INST
IL-1 Beta Mouse Uncoated ELISA Kit	960 tests	88-7013A-88
IL-2 Human Instant ELISA Kit	128 tests	BMS221INST
IL-6 Human ELISA Kit, High Sensitivity	96 tests	BMS2132HS
IL-6 Human Instant ELISA Kit	128 tests	BMS213INST
IL-6 Mouse Uncoated ELISA Kit	960 tests	88-7064-88
IL-18 Human Instant ELISA Kit	128 tests	BMS267INST
Insulin Human ELISA Kit	96 tests	KAQ1251
IP-10/CXCL10 Human Instant ELISA Kit	128 tests	BMS284INST
PRAS40 (Phospho) [pT246] Human ELISA Kit	96 tests	KHO0421
SAA Livestock ELISA Kit	96 tests	KAA0021
STAT3 (Phospho) [pY705] Multispecies ELISA Kit	96 tests	KHO0481
Tau (Phospho) [pS396] Human ELISA Kit	96 tests	KHB7031
Tau (Phospho) [pT181] Human ELISA Kit	96 tests	KHO0631
Tau (Total) Human ELISA Kit	96 tests	KHB0041
Tau (Total) Human ELISA Kit	192 tests	KHB0042
TNF Alpha Human ELISA Kit	96 tests	KHC3011
TNF Alpha Human Instant ELISA Kit	128 tests	BMS223INST
TNF Alpha Human Uncoated ELISA Kit	960 tests	88-7346-88
TNF Alpha Mouse Uncoated ELISA Kit	960 tests	88-7324-88
TNF Alpha Mouse Uncoated ELISA Kit	1,920 tests	88-7324-77
Rapid ELISA Mouse mAb Isotyping Kit	60 tests	37503
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