

High-performance, easy-to-use detection systems to simplify your research





# Ready for Your Research

GloMax® Discover, Explorer and Navigator are state-of-the-art detection readers offering luminescence, fluorescence and absorbance detection capabilities with preloaded protocols and touch screen functionality. They make data analysis easy.

## Easy-To-Use

The intuitive touchscreen display, preloaded protocols and automatic instrument gain adjustments make it simple to produce your data and analyze results.

## Integrated with Promega Assays

Optimized, preloaded Promega protocols are part of the GloMax® Systems Software, minimizing the time you spend optimizing instrument settings, and ensuring your experiments run smoothly.

## Flexible

Select the detection module or modules you need for your assays. The GloMax® Discover and Explorer Systems can be placed on a bench top for standalone use or integrated into a larger automated platform for higher throughput. Whatever your workflow, GloMax® Systems will accommodate your needs.

## Superior Performance

The GloMax® Systems provide a broader dynamic range to measure both high and low samples within the same experiment, resulting in better sensitivity for detecting low-level samples and lower well-to-well cross talk. You can be confident in your readings.

## World Class Service and Support

GloMax® Systems come with a comprehensive one-year standard warranty, and our expert service team is available to help if you have questions about either the instrument or chemistries. We offer a full line of additional service products, including Installation and Operation Qualification (IQ/OQ).

# The Right Instrument for Your Needs

GloMax® Discover, Explorer and Navigator offer a range of detection options. Purchase the instrument and modules you need now. Upgrade GloMax® Explorer systems (GM3510 and GM3500) later as your laboratory needs change.

GloMax® Systems Model	Luminescence	Fluorescence	Visible Absorbance	UV-Absorbance	BRET and FRET
GloMax® Navigator Model GM2000/2010	✓				
GloMax® Explorer Model GM3510	✓	✓	Upgrade	Upgrade	Upgrade
GloMax® Explorer Model GM3500	✓	✓	✓	Upgrade	Upgrade
GloMax® Discover Model GM3000	✓	✓	✓	✓	✓



# Easy to Use for Your Application

## Automatic Filter Slides

- Multiple reads without user intervention
- Easily perform BRET and FRET studies
- Customize filters for your needs

## Flexible Interface

- Select a preloaded protocol or customize your own
- Set up a plate map
- View data in a heat map display to quickly identify trends
- Easily export your results to a variety of locations including a local network, web-based cloud, LIMS or any drive desired



Figure 2. Integrated Filter Slides for GloMax® Discover and Explorer.



Figure 3. Heat Map Display.



Figure 4. Drag and Drop Protocols.



# Integrated with Promega Assays

GloMax® Systems offer superior performance for a wide array of assays for your research. The sensitivity, broad dynamic range and low well-to-well cross talk provide you with more usable and relevant data.

Whether you study cell health, monitor cell viability or toxicity, or assay signaling pathways, GloMax® Systems produce data you can use. Are you developing drug candidates and monitoring kinase activity? These Detection Systems are ready to support your research. GloMax® Systems also detect readout from Promega bioassays and evaluate monoclonal antibody activity.

## Developed and Optimized at Promega

- Use the 50 preloaded protocols, or customize your own
- Optimized settings to achieve the best results, producing data more quickly
- Protocols available for:
  - Nucleic acid quantitation for next-generation sequencing
  - BRET and FRET for protein interaction analysis
  - Kinase and cell signaling assays
  - Multiplexing assays
  - Cell-based assays
  - Reporter gene assays
  - Bioassays
  - ELISAs



Figure 5. Select your protocol of interest from the preloaded list.

# The Versatility and Performance You Need

## Multiplex Assays

Easily read multiplexed cell viability, apoptosis and cytotoxicity assays.

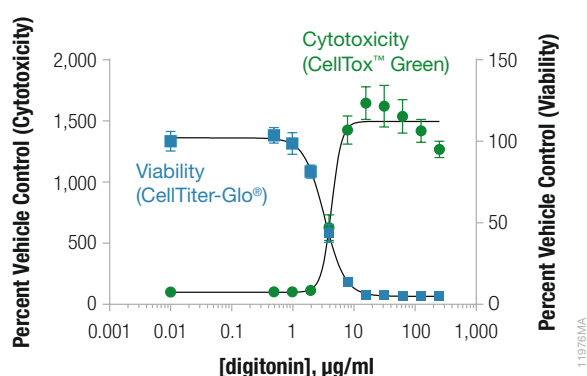


Figure 6. Multiplexed cytotoxicity and viability assays performed on digitonin-treated K562 cells.

## Screen Kinase Inhibitors

Efficiently read the output of kinase inhibitor screening and automatically analyze results.

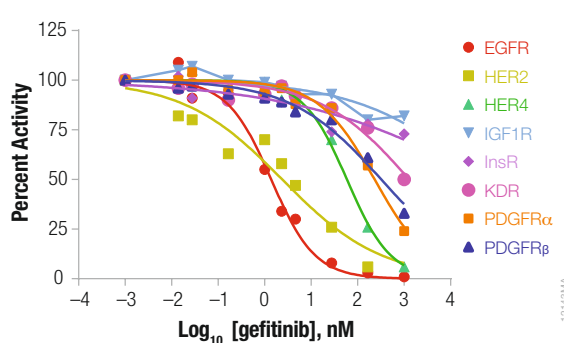


Figure 7. Receptor tyrosine kinase inhibition was assessed following incubation with gefitinib, a selective inhibitor of EGFR, using the ADP-Glo™ Kinase Assay.

## Assess Reporter Bioassays

Detect luminescence from Promega bioassays and evaluate mAb activity.

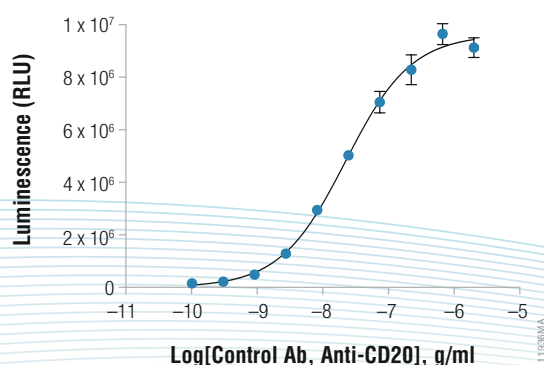


Figure 8. ADCC Bioassay Target cells were incubated with a series of concentrations of Control Ab, Anti-CD20, followed by addition of ADCC Bioassay Effector Cells.

## Study Protein:Protein Interactions

Analyze the interaction of proteins using BRET.

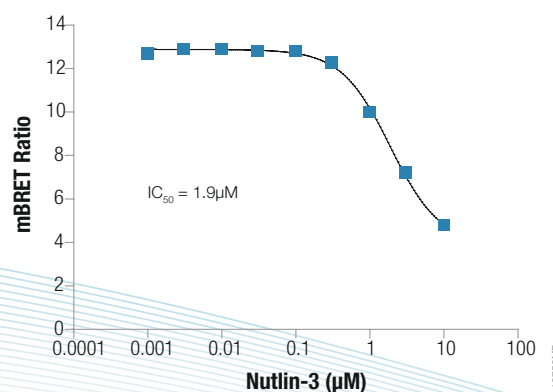


Figure 9. A dose-response curve showing the disruption of the p53 and MDM2 interaction using the inhibitor Nutlin-3 in a NanoBRET® assay.

# Flexibility to Use Alone or as Part of an Automated Workflow

The GloMax® Discover and Explorer Detection Systems can be used on a bench top or integrated into your automated workflow for higher throughput and walk-away operation.

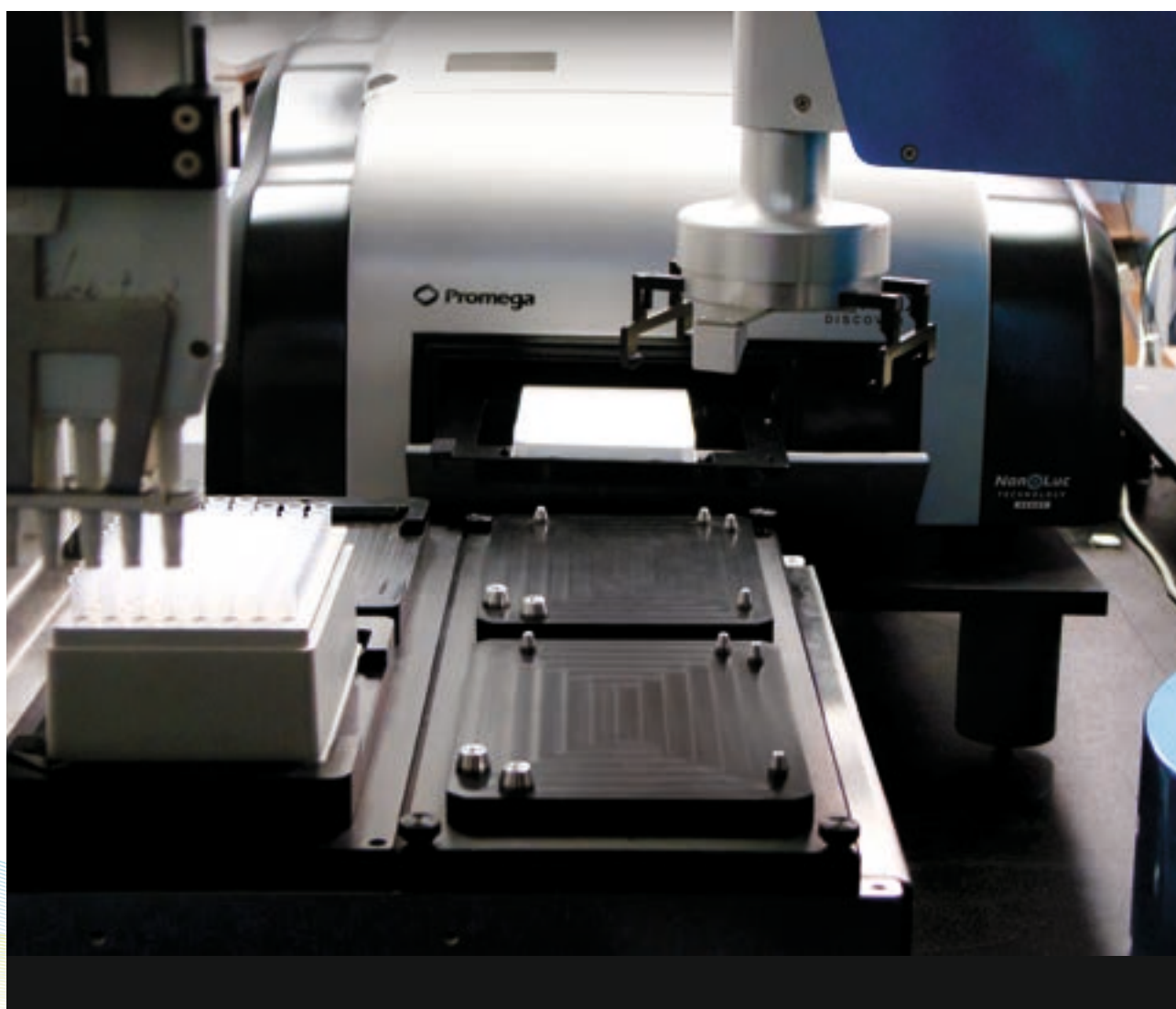
## Automation Ready

GloMax® Discover and Explorer Systems can be controlled by third-party scheduling software with liquid handling and plate stackers to give you complete, walk-away automation. The software is SiLA compatible, making integration device control simple as SiLA standards evolve.

**SiLA** Rapid Integration®

## Third Party Integration

The GloMax® Discover and Explorer Systems can be integrated with Tecan Freedom EVO®, Hudson Robotics Solo™ and PlateCraneEX™, Hamilton Microlab® STAR series, and many other hardware systems.



# GloMax<sup>®</sup> Navigator Specifications

## Luminescence

- Low-noise PMT ensures collected light is not compromised
- 10 to 1,000 times more sensitive than competitor instruments
- No need to dilute samples or manage gain settings
- 2 to 3 logs more usable data than competing instruments
- Lower cross talk for more usable data

### Luminescence Module Specifications

Detector	Top-reading, head-on photon counting photomultiplier tube (PMT)
Wavelength Range	350–700nm
Detection Limit	$1.5 \times 10^{-21}$ moles of luciferase
Linear Dynamic Range	9 logs
Cross talk	Less than $3 \times 10^{-5}$ (white, 96-well plate, Corning 3912)

### Injector System Specifications

Number of injectors (optional)	Two injectors
Dispense Volume Range	5–200 $\mu$ l in 1 $\mu$ l increments
Plate Compatibility	96-well plates
Waste Collection Tray Volume	Approximately 50ml
Void Volume	500 $\mu$ l





# GloMax<sup>®</sup> Discover and Explorer System Specifications

## Luminescence

- Low-noise PMT ensures collected light is not compromised
- 10 to 1,000 times more sensitive than competitor instruments
- No need to dilute samples or manage gain settings
- 2 to 3 logs more usable data than competing instruments
- Filtered luminescence readout for BRET or multi-wavelength distinction (for GloMax<sup>®</sup> Discover only) or total luminescence
- Lower cross talk for more usable data
- Five filters included for BRET and filtered luminescence assays such as NanoBRET<sup>®</sup>, *Renilla*/YFP BRET and Chroma-Glo<sup>™</sup> (for GloMax<sup>®</sup> Discover only)
- Or, customize all 5 luminescence filters to your needs (for GloMax<sup>®</sup> Discover only)

### Luminescence Module Specifications

Detector	Top-reading, head-on photon counting photomultiplier tube (PMT)
Wavelength Range	350–700nm
Detection Limit	$3 \times 10^{-21}$ moles of luciferase
Linear Dynamic Range	9 logs
Cross talk	Less than $3 \times 10^{-5}$ (white, 96-well plate, Corning 3912)
Filtered Luminescence	GloMax <sup>®</sup> Discover: built-in filter paddle Filter paddle containing 5 standard filters for luminescence including: 495nm SP, 530nm LP, 540nm SP, 600nm LP and 450nm (8nm BP). Additional Custom emission filters are available upon request.

### Injector System Specifications

Number of injectors (optional)	Two injectors
Dispense Volume Range	5–200µl in 1µl increments
Plate Compatibility	6, 12, 24, 48 and 96-well plates
Waste Collection Tray Volume	Approximately 50ml
Void Volume	500µl

## Fluorescence

- Uses powerful wavelength-matched, light-emitting diodes (LED) as excitation sources
- LEDs closely match excitation profiles of commonly used fluorescent molecules to ensure high sensitivity
- Reduces nonspecific light leakage, a common problem when using broad-spectrum light sources
- Five excitation and emission filters included for common fluorescence assays; plus 1 customizable excitation and emission position
- Or, customize two fluorescence excitation positions or all 6 emission positions to your needs

### Fluorescence Module Specifications

Detector	PIN-photodiode
Light Source	Wavelength-matched LED
Read Position	Top reading
Wavelengths selection	Filter module with 5 standard excitation and emission filters. Empty filter positions are available for custom excitation and emission wavelengths.
Wavelengths included	UV (Ex: 365nm, Em: 415–445nm) Blue (Ex: 475nm, Em: 500–550nm) Green (Ex: 525nm, Em: 580–640nm) Red (Ex: 625nm, Em: 660–720nm) AFC (Ex: 405nm, Em: 495–505nm)
Detection Limit	2fmol fluorescein/200µl
Linear Dynamic Range	>6 logs (assay dependent)

## Absorbance

- GloMax® Discover comes factory installed with 9 UV-Visible filters for common colorimetric assays
- GloMax® Explorer GM3500 comes factory installed with 5 Visible Absorbance filters
- Ideal for ELISA, protein and nucleic acid assays

### UV-Visible Absorbance Module Specifications

Detector	Top-reading, head-on photon counting photomultiplier tube (PMT)
Light Source	Xenon flash lamp
Spectra Range	200–600nm
Filter Wheel	GloMax® Discover: 9 absorbance filters included GloMax® Explorer: 5 absorbance filters
Wavelengths included	GloMax® Discover: 230, 260, 280, 320, 405, 450, 490, 560 and 600nm 10nm bandwidth GloMax® Explorer: 405, 450, 490, 560 and 600nm 10nm bandwidth
Detection Limit	0.1 O.D.
Dynamic Range	0–4.0 O.D.

# GloMax® Navigator

## Instrument Specifications

Detection Modes	Luminescence
Read Type	Glow, Flash, Kinetic, Repeat
Sample Format	96-well plates
Tablet PC	Windows® 10 Tablet PC with USB connection to instrument, wireless connectivity to local network; export to network, cloud or USB flash drive
Dimensions	18.6 in (47.2 cm) width, 20.0 in (50.8 cm) depth 9.4 in (23.9 cm) height without Tablet PC mounted 18 in (45.7 cm) height with Tablet PC mounted
Weight	Approximately 18.1 kg
Power Requirements	0.5 A @ 100–240 V AC, 50/60 Hz (universal)
Warranty	1-year parts and labor warranty included
Regulatory Compliance	For Research Use Only. Not for use in Diagnostic Procedures.

# GloMax® Discover and Explorer System

## Instrument Specifications

Detection Modes	GloMax® Discover: Luminescence, Fluorescence Intensity, UV-Visible Absorbance, Filtered Luminescence, BRET and FRET GloMax® Explorer: Luminescence, Fluorescence Intensity and Visible Absorbance
Shaker System	Linear or orbital patterns, 100–500 cycles per minute
Heating System	Temperature Range Ambient +5°C to 45°C
Read Type	Glow, Flash, Kinetic, Repeat
Sample Format	6-, 12-, 24-, 48-, 96- and 384-well plates
Tablet PC	Windows® 10 Tablet PC with USB connection to instrument, wireless connectivity to local network; export to network, cloud or USB flash drive
Read Speed	96-well plate: less than 1 minute; 384-well plate: less than 3 minutes
Automation Compatibility	Hardware and software accessible to third party hardware/software control
Dimensions	18.5 in (46.9 cm) width, 19.5 in (46.5 cm) depth 10 in (25.4 cm) height without Tablet PC mounted 16 in (35.5 cm) height with Tablet PC mounted
Weight	Approximately 27 kg
Power Requirements	100–240 V AC, 50/60 Hz
Warranty	1-year parts and labor warranty included
Regulatory Compliance	For Research Use Only. Not for use in Diagnostic Procedures

# Single-Source Service and Support

GloMax® Systems are all backed by a comprehensive one-year standard warranty, and our expert technical and service support teams.

## One Call Supports It All

We supply both the reagents and the instrument, so one call to Promega technical support answers any questions you may have about assay chemistries or instrument performance.

Expert support, instrument loan programs and service packages ensure minimal downtime. Additional warranty and service agreements are available for coverage beyond the one-year standard warranty.

To learn more about our extensive service products visit:  
[www.promega.com/glomax-overview](http://www.promega.com/glomax-overview)

## Ordering Information

Product	Size	Cat.#
GloMax® Discover System <i>Configured with Luminescence, Fluorescence and UV-Visible Absorbance</i>	1 each	GM3000
GloMax® Explorer System <i>Configured with Luminescence, Fluorescence and Visible Absorbance</i>	1 each	GM3500
GloMax® Explorer System <i>Configured with Luminescence and Fluorescence</i>	1 each	GM3510
GloMax® Explorer Absorbance Mod Upgrade	1 each	GM3520
GloMax® Explorer UV-Visible Absorbance Upgrade	2 each	GM3560
GloMax® Explorer BRET/FRET Upgrade	3 each	GM3570
GloMax® Dual Injectors with Pumps	1 each	GM3030
GloMax® Navigator System <i>Configured with Luminescence and Dual Injectors</i>	1 each	GM2010
GloMax® Navigator System <i>Configured with Luminescence</i>	1 each	GM2000

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### Dołącz do nas

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