

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

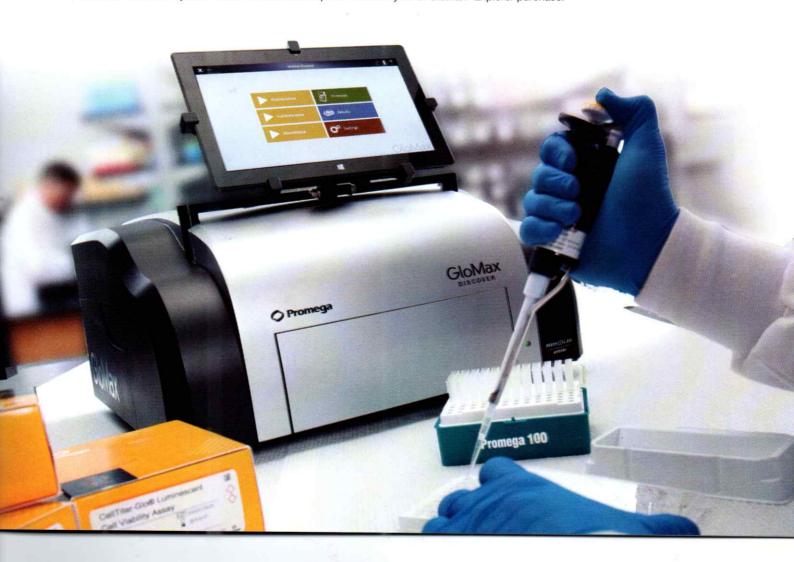
GloMax® Systems come with a comprehensive one-year standard warranty, and our expert service team is available to help if you have questions about either the instrument or chemistries. We offer a full line of additional service products, including Installation and Operation Qualification (IQ/OQ).

## 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 your system later as your laboratory needs change.

GloMax <sup>®</sup> Systems Model	Luminescence	Fluorescence	Visible Absorbance	UV-Visible Absorbance	BRET and FRET
GloMax® Navigator Model GM2000/2010	~				
GloMax® Explorer Model GM3510	~	V	Upgrade	Upgrade*	Upgrade*
GloMax® Explorer Model GM3500	V	V	V	Upgrade*	Upgrade*
GloMax® Discover Model GM3000	~	~		~	V

\*Note: GloMax® Explorer functionality upgrade to UV absorbance and BRET/FRET are through trade-in for a new GloMax® Discover System. Trade-in must be completed within 1 year of GloMax® Explorer purchase.



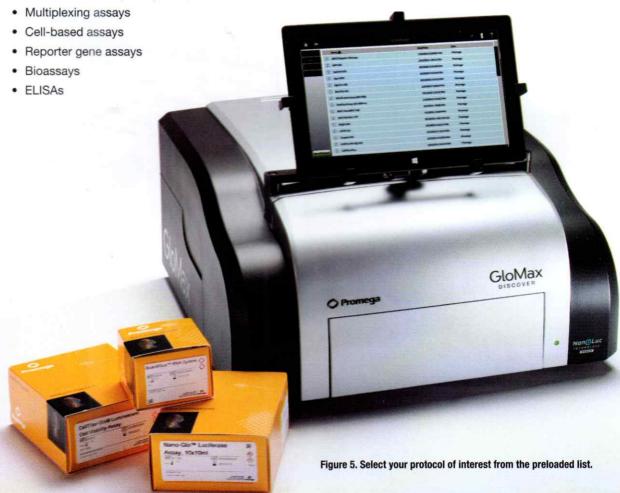
## Integrated with Promega Assays

GloMax® Detection 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



## The Versatility and Performance You Need

### **Multiplex Assays**

Easily read multiplexed cell viability, apoptosis and cytotoxicity assays.

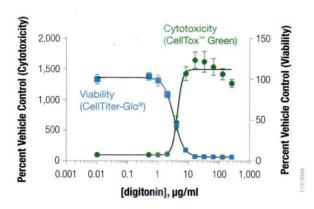


Figure 6. Multiplexed cytotoxicity and viability assays performed on digitonin-treated K562 cells.

### Assess Reporter Bioassays

Detect luminescence from Promega bioassays and evaluate mAb activity.

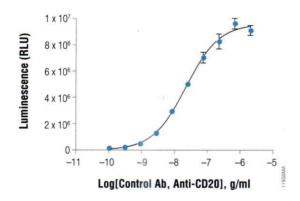


Figure 8. ADCC Bioassay Target cells were incubated with a series of concentrations of Control Ab, Anti-CD20, followed by addition of ADCC Bioassay Effector Cells.

### Screen Kinase Inhibitors

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

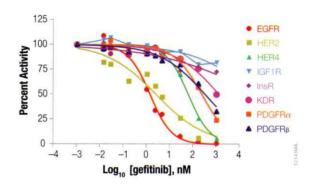


Figure 7. Receptor tyrosine kinase inhibition was assessed following incubation with gefitinib, a selective inhibitor of EGFR, using the ADP-Glo™ Kinase Assay.

### Study Protein: Protein Interactions

Analyze the interaction of proteins using BRET.

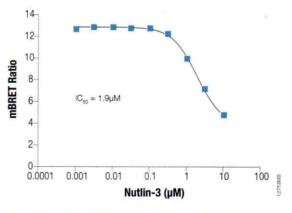


Figure 9. A dose-response curve showing the disruption of the p53 and MDM2 interaction using the inhibitor Nutlin-3 in a NanoBRET™ assay.

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

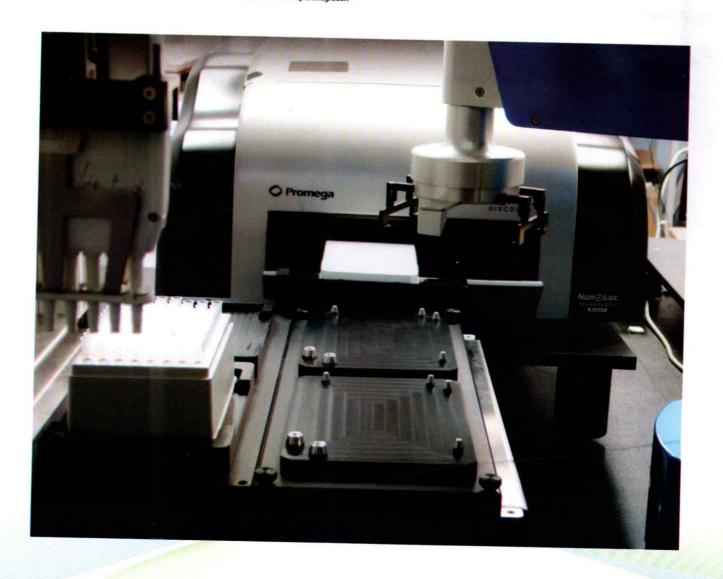
The GloMax® Detection Systems can be used on a bench top or integrated into your automated workflow for higher throughput and walk-away operation.

### **Automation Ready**

GloMax® 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.

### **Third Party Integration**

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



# GloMax® 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**

Top-reading, head-on photon counting photomultiplier tube (PMT) Range 350–700nm	
9 logs	
Less than 3 × 10 <sup>-5</sup> (white, 96-well plate, Corning 3912)	

### Injector System Specifications

Two injectors	
5–200μl in 1μl increments	
96-well plates	
Approximately 50ml	
500µl	
	5–200µl in 1µl increments  96-well plates  Approximately 50ml



# GloMax® 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® Discover only) or total luminescence
- · Lower cross talk for more usable data
- Five filters included for BRET and filtered luminescence assays such as NanoBRET®, Renilla/YFP BRET and Chroma-Glo™ (for GloMax® Discover only)
- Or, customize all 5 luminescence filters to your needs (for GloMax® Discover only)

### **Luminescence Module Specifications**

Detector	Top-reading, head-on photon counting photomultiplier tube (PMT)	
Wavelength Range	350–700nm	
Detection Limit	3 × 10 <sup>-21</sup> moles of luciferase	
Linear Dynamic Range	9 logs	
Cross talk	Less than 3 × 10 <sup>-5</sup> (white, 96-well plate, Corning 3912)	
Filtered Luminescence	GloMax® Discover: built-in filter paddle	

### **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.	



# 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/GloMaxService

### **Ordering Information**

Product	Size	Cat.#
GloMax® Discover System		
Configured with Luminescence, Fluorescence and UV-Visible Absorbance	1 each	GM3000*
GloMax® Explorer System		
Configured with Luminescence, Fluorescence and Absorbance	1 each	GM3500*
GloMax® Explorer System		
Configured with Luminescence and Fluorescence	1 each	GM3510*
GloMax® Navigator System		
Configured with Luminescence and Dual Injectors	1 each	GM2010*
GloMax® Navigator System		
Configured with Luminescence	1 each	GM2000*
Company with LLC Instrument and Tablet DO		

<sup>\*</sup>Comes with U.S. Instrument and Tablet PC power cords.

Products may be covered by pending or issued patents or may have certain limitations. Please visit our Web site for more information.

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