

# SpectraMax Glo Steady-Luc Reporter Assay Kit

Luciferase measurement for your microplate reader assay

## KEY FEATURES

- **Glow-type luminescence provides an extended signal time window enabling batch processing of plates in screening assays**
- **Optimized for luminescence microplate readers**
- **Simplified data acquisition and analysis with preconfigured protocols in SoftMax Pro Software**

Reporter gene assays are an important tool for biomedical and pharmaceutical researchers to monitor cellular events associated with gene expression, gene regulation, and signal transduction. Firefly luciferase, one of the most commonly used reporters, produces light by catalyzing a bioluminescence reaction that oxidizes D-luciferin in the presence of oxygen and ATP. The application of luciferase-based reporter assay using luminescence microplate readers has become increasingly popular for high-throughput analysis of gene expression as well as drug discovery applications.

The SpectraMax® Glo Steady-Luc™ Reporter Assay Kit provides a highly sensitive assay for the quantitation of firefly luciferase expression in mammalian cells. Using a homogeneous protocol, the specially formulated reagent mixture in this kit modifies the activity of luciferase for a significantly extended signal window with half-life around three hours, therefore enabling batch processing of plates in screening assays. This assay kit is optimized for Molecular Devices SpectraMax® microplate readers with a preconfigured protocol provided in SoftMax® Pro Software for simplified data acquisition and analysis.

## Easy workflow

The SpectraMax Glo Steady-Luc Reporter Assay Kit offers a homogeneous workflow which is optimized specifically for microplate readers. A typical experimental workflow is presented in Figure 1.

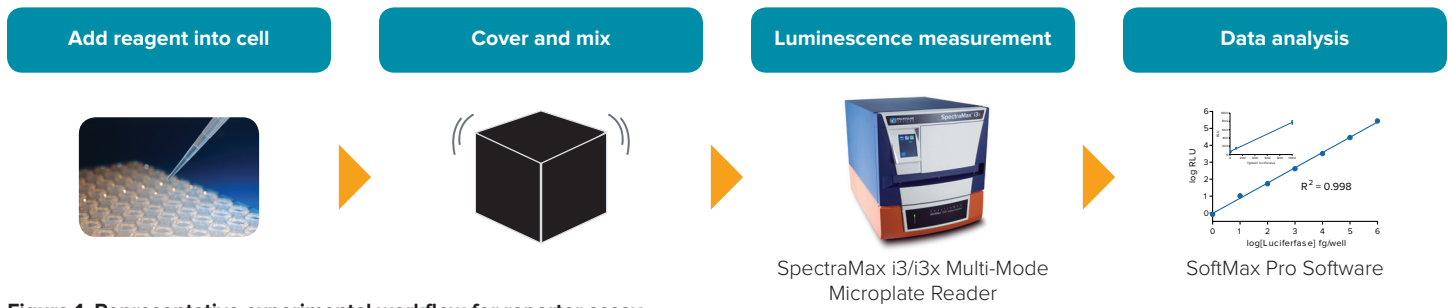


Figure 1. Representative experimental workflow for reporter assay.

## Optimal data quality for microplate reader assay

The SpectraMax Glo Steady-Luc Reporter Assay Kit is designed for optimal performance on microplate readers with high throughput enabled by both the microplate format and extended signal window. The stability of the luminescent signal, as well as the linear detection ranges measured with purified luciferase, is presented in Figure 2.

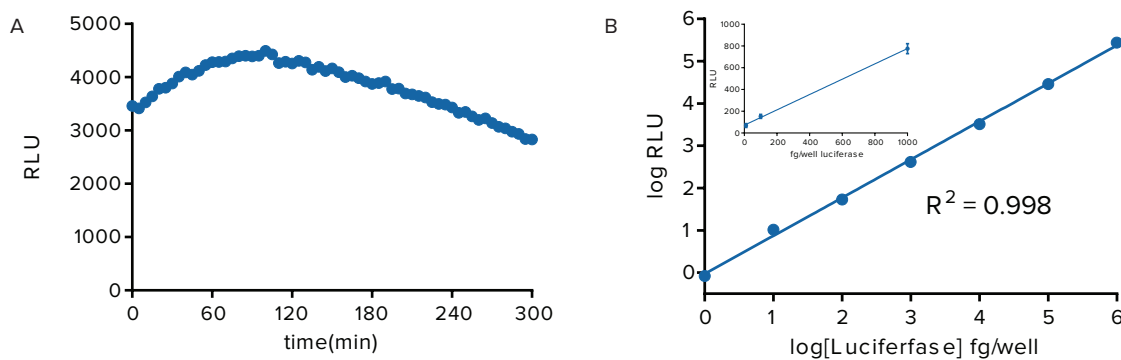


Figure 2. Luminescence measurement on the SpectraMax i3/i3x reader. (A) Extended signal stability with signal at 5 hours within 20% of initial value. (B) The wide linear detection range spanning 7 orders of magnitude with lower detection limit at 5 femtograms/well.

In experiment with cells transfected with firefly luciferase gene, the number of cells correlates linearly with luciferase expression in Figure 3.

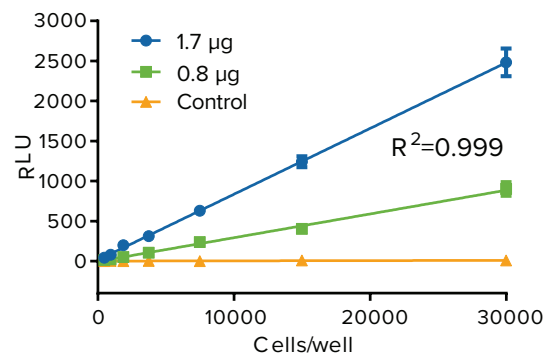


Figure 3. Data show cells correlating linearly with luciferase expression. CHO-K1 cells were transiently transfected with different concentrations of firefly luciferase cDNA with different cell titration measured by the luminescence signal using the SpectraMax Glo Steady-Luc Reporter Assay Kit.

## Ordering information

The SpectraMax Glo Steady-Luc Reporter Assay Kit is available in two formats for different throughput requirements. The Explorer kit is sufficient for two 96-well microplates whereas the Bulk kit is sufficient for ten 96-well microplates. The number of microplates is based on the example protocol validated by Molecular Devices.

Assay kit	Part number	
	Explorer	Bulk
SpectraMax® Glo Steady-Luc™ Reporter Assay Kit **	R8352	R8353

### Place your order online.\*

\*Currently only available for US customers

\*\* Compatible with Molecular Devices microplate readers

- SpectraMax® i3/i3x Multi-Mode Microplate Reader
- SpectraMax® M3/M4/M5/M5e Multi-Mode Microplate Readers
- SpectraMax® Paradigm® Multi-Mode Microplate Reader
- FlexStation® 3 Multi-Mode Microplate Reader
- FilterMax™ F3/F5 Multi-Mode Microplate Readers
- SpectraMax® L Microplate Reader

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