

**Custom Bioluminescence Reagents** 

# Customize Promega bioluminescence reagents to optimize your workflow

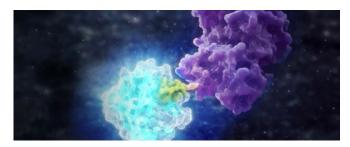
#### **Innovative Bioluminescence Technology**

Promega has exploited the chemistry of the bioluminescent reaction to create a suite of robust and sensitive biological assays. We offer a number of luminescence output ("Glo") assays for measuring cell health, cytotoxicity, apoptosis and other cellular events.

Our production team is experienced in the manufacturing and testing of luminescence-based ATP detection and reporter assay reagents. ATP reactions can be tailored for a variety of applications as broad as compound screening, ATP-based microbe testing, and biologic drug discovery and screening. Our bioluminescence platform provides you with many options. Promega luciferase technology is a fundamental platform on which many of our innovative products are built, from the earliest firefly luciferase assays to the Dual-Luciferase® Reporter Assays to the new NanoLuc® Luciferase and substrate. These assays have several advantages:

- Highly sensitive—strong luminescence signal
- Less prone to test compound interference than fluorescent assays
- Amenable to automation and multiplexing with other assay technologies

Additionally, we offer many luminescence-based biochemical assays for detecting the activity of enzymes such as kinases, phosphatases, cytochrome P450 proteins, P-glycoprotein (Pgp) and monoamine oxidase (MAO), among others.



Our portfolio includes automation-friendly reagents supporting many applications, including:

- · Microbial testing
- High-throughput screening
- Bioanalysis and biotransformation
- Pharmacogenomics
- Biomarker discovery and development
- · Assay development for QC lot release
- High-throughput genomics and CRISPR gene editing

### **Custom Formulation and Dispensing**

Many options exist for producing these substrates, reagents and buffers in bulk, in specific concentrations, and in specialized formats. You can order up to 400 liters from a single lot. Our 1X frozen liquid reporter assay reagents provide convenience and reproducibility for high-throughput screening (HTS) applications. We can also provide frozen liquid concentrated substrates or custom packaging to meet your workflow requirements.

Products can be dispensed on automated glass vial lines to maintain throughput, reduce costs and reduce errors. We can dispense into small vials or large bulk bottles, with over 80 choices of vials and bottles. Bulk reagents are kept chilled throughout the manufacturing and dispensing process.

With three state-of-the-art lyophilizers, we are able to customize lyophilized products such as the luciferase "Glo" substrates. Batch sizes are up to 40,000 vials per run. The lyophilizers are designed for highly automated operation with clean-in-place and steam-in-place capabilities and 24/7 operation.



#### **Custom Bioluminescence Reagents**

#### **Custom Packaging**

In drug discovery screening and high-throughput applications, efficiency and timeliness of results is critical. To meet your workflow needs, we can:

- Manufacture bulk reagents in volumes of 0.5ml to 650 liters.
- Use in-house state-of-the-art lyophilizers to provide custom substrate options.
- Bulk package components to streamline the amount of packaging material provided to your laboratory.
- Package reagents in larger sizes, so you do not have to spend your time opening many tubes.



#### **Case Study: Custom Packaging Design**

A major research institution placed a large order for CellTiter-Glo® Cell Viability Assay reagents, which are traditionally shipped with individual glass vials each wrapped in bubble wrap. For customers ordering extremely large quantities (e.g., a year's supply), unwrapping each individual bottle can be tedious and time-consuming.

The Promega Field Applications Specialist for the account worked with the Custom Operations team in Madison, Wisconsin to see if packaging could be customized for this

large order. The goal was to reduce packaging materials, ensure safe delivery of the product and save the customer time at unpackaging.

The Custom Operations team worked to design a new packaging configuration that met our stringent quality and packaging requirements and protected the product from damage, as demonstrated by testing using our in-house equipment. As a result, this large order shipped in the new packaging and the customer was able to unpack the entire shipment in under an hour.







## **Contact us today!**

One of our scientists will be in touch to discuss your needs, address your challenges and serve as your champion in finding a custom solution.

www.promega.com/CustomSolutions

custom@promega.com

