

# Dual Luciferase Reporter Gene Assay Kit

**Cat. No.** Kit-0525    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Dual Luciferase Reporter Gene Assay Kit is used for sequential measuring the activity of two different luciferases, firefly (FFL) and Renilla (RL), in a single sample.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Description</b>      | The accuracy of reporter assays can be improved by utilizing a dual reporter system. One of the reporter genes is correlated with the promoter of interest and is used to assess the effects of specific experimental conditions, while the second reporter is used as a control and serves as a baseline response. The Dual Luciferase Reporter Gene Assay Kit allows for the sequential measurement of the activity of two different luciferases, firefly (FFL) and Renilla (RL), in a single sample. The firefly luciferase luminescence is measured first by addition of the FFL Reagent. Next, the RL Reagent is added to the same well. The RL Reagent simultaneously quenches the firefly luciferase luminescence and initiates the Renilla luciferase reaction. The light production of both reactions can be conveniently measured on a luminometer. |
| <b>Applications</b>     | Gene Regulation: gene expression level, characterization of promoter activity, modulation of gene expression by receptors, transcription factors and small molecules. Drug Discovery: high-throughput screen for gene modulators.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Usage</b>            | For research use only (RUO)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage</b>          | Store all Reagents at -20°C. Shelf life: 12 months after receipt.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Kit Components</b>   | Lysis Buffer 25 mL Assay Buffer 25 mL FFL Reagent 25 mg RL Reagent 400 mg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Detection method</b> | Luminescence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Compatible Sample  
Types**

Cell

**Features & Benefits**

High sensitivity and wide detection range: detection of as little of 2 fg luciferase. Compatible with routine laboratory and HTS formats: assays can be performed in tubes or microplates, and measured with any luminometer. Can be readily automated on HTS liquid handling systems. Fast and convenient: three step assay allows detection of dual luciferase levels within 20 minutes.

 Tel: 1-631-559-9269 1-516-512-3133 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA