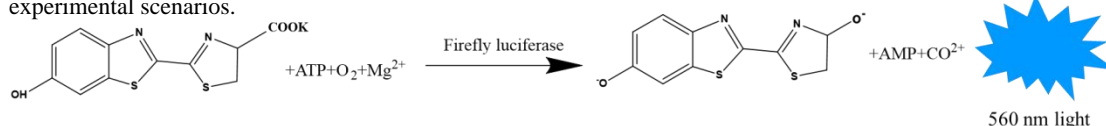


## User Manual for CHASELECTION Enhanced Luciferase Reporter Gene Assay Kit

### Introduction:

Firefly luciferase catalyzes the oxidative carboxylation of luciferin in the presence of oxygen, ATP and  $Mg^{2+}$ , releasing optical signals, which is a highly efficient luminescence reaction and is therefore designed to detect and quantify the expression of firefly luciferase in mammalian cells.

CHASELECTION enhanced luciferase reporter gene assay kit combines both luminescence intensity and luminescence time, having the best balance and powerful performance in the series of products. It can be used in various experimental scenarios.



This product is easy to use. Simply mix the substrate with the luciferase detection buffer and add it directly to the cell to detect the signal of luciferase in the cell.

### Product constituent:

Constituent:	CY058F0010KIT (100 Test)	CY058F0100KIT (1000 Test)	CY058F1000KIT (10000 Test)
Luciferase Assay Buffer	10ml	100ml	1000 ml
	10ml/bottle	50ml/bottle	250ml/bottle
Substrate (50×)	200μl	2ml	20ml
	200μl/vial	1ml/vial	2ml/vial

### Main Application

Gene expression measurement of transient and stable mammalian cells

Determination of high-throughput drug screening

Large scale startup of subfunction determination

### Storage and Validity:

The product is shipped with blue ice. Please store in a dark and dry place at -20~-80 °C. Please use before the expiration date indicated on the label.

### Instructions for use:

#### 1.Preparation of testing reagents

Before use, place the reagent at room temperature or 4 °C to fully dissolved. Mix Substrate and Luciferase Assay Substrate in a ratio of 1:50 until they are completely dissolved. The test reagent should be used on the same day after preparation.

Attention: Before opening the lid, it is recommended to centrifuge and concentrate the liquid to the bottom.

#### 2.Steps for luciferase detection

- 1) Balance the above testing reagents and the cell sample to be tested to room temperature.
- 2) Add detection reagents of the same volume as the culture medium to each well. Add 100μl of reagent to each hole for 96-well plate and 30μl to each hole for 384-well plate. It is recommended to shake it at 1200 rpm for 5 minutes and thoroughly mixing
- 3) After the cells are fully lysed, assay the luminescent signal

Note: Due to its short half-life, it is necessary to detect the signal of luciferase in cells within 10 minutes.

**NOTE:**

- It is recommended to use a full white board for luminescence reaction detection, with the highest sensitivity and minimal interference between pores.
- Avoid repeated freeze-thaw cycles.
- Do not mix samples from different batches.