# User Manual for CHASELECTION Hypersensitivity Luciferase Reporter Gene Assay Kit

## Introduction:

Firefly luciferase catalyzes the oxidative carboxylation of luciferin in the presence of oxygen, ATP and Mg, rele asing optical signals, which is a highly efficient luminescence reaction and is therefore designed to detect and quantif y the expression of firefly luciferase in mammalian cells.

The CHASELECTION hypersensitive luciferase reporter gene assay kit has been optimized in terms of sensitivit y, with the highest luminescence intensity and extremely high sensitivity among the series of products, suitable for ex perimental scenarios with few samples but high sensitivity requirements.



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:	CY060F0010KIT	CY060F0100KIT	CY060F1000KIT
	(100 Test)	(1000 Test)	(10000 Test)
Luciferase Assay Buffer	10ml	100ml	1000ml
	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 expirat ion date indicated on the label.

### Instructions for use:

### 1. Preparation of testing reagents

Before use, place the reagent at room temperature or 4  $^{\circ}$ C to fully dissolved. Mix Substrate and Luciferase Assay Su bstrate in a ratio of 1:50 until they are completely dissolved. The test reagent should be used on the same day after p reparation.

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 100µ of reagent to each ho

le for 96-well plate and 30µ to each hole for 384-well plate. It is recommended to shake it at 1200 rpm for 5 minut es and thoroughly mixing

3) After the cells are fully lysed, detect 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 i nterference between pores.

- Avoid repeated freeze-thaw cycles
- Do not mix samples from different batches