



SuperLight™ Luciferase Reporter Gene Assay Kits and HTS Reagents

The SuperLight™ Luciferase Assay Kits provide an ultrasensitive single-step homogeneous assay for quantifying luciferase expression in cells transfected with the bioluminescent reporter gene.

APPLICATIONS:

Gene regulation: simply place the luciferase gene downstream of the promoter under study in a suitable expression vector and transfect cells. Gene regulation can be conveniently studied by measuring the changes in luciferase expression using the SuperLight™ Reagent [1].

High-throughput screening for modulators of gene expression: gene expression modulators can be screened in 96-well, 384-well and 1536-well microplates from compound libraries using recombinant cells [2].

KEY FEATURES:

High sensitivity and wide detection range: detection of as little of 50 fg luciferase. The emitted light is linear over seven orders of magnitude. Luciferase activity in as few as 4 cells can be detected.

Fast and convenient: homogeneous "mix-and-measure" assay allows detection of luciferase levels within 5 minutes. The optimally combined reagent system involves a single addition step with simultaneous cell lysis and detection.

Compatible with routine laboratory and HTS formats: assays can be performed in tubes, microplates, on LJJ Analyst, luminometers, Top-Count, MicroBeta counters, chemiluminescent image plate readers (CLIPR/LeadSeeker). Assay reagents compatible with all liquid handling systems.

Robust and amenable to HTS: Z' factors of 0.6 to 0.8 are observed in 96-well and 384-well plates. Can be readily automated on HTS liquid handling systems.

PRODUCT INFORMATION:

SuperLight™ Luciferase Reporter Gene Assay Kit SLLU-200

Each kit is sufficient for 200 assays in 96-well plate (or 800 assays in 384-well plate). Kit includes:

- 1 x 20mL SuperLight™ Assay Buffer
- 1 vial SuperLight™ Luciferase Reagent

SuperLight™ Luciferase Reporter Gene Assay Kit SLLU-500

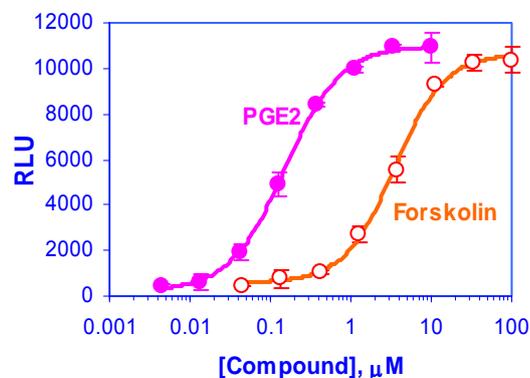
Each kit is sufficient for 500 assays in 96-well plate (or 2,000 assays in 384-well plate). Kit includes:

- 1 x 50mL SuperLight™ Assay Buffer
- 1 vial SuperLight™ Luciferase Reagent

SuperLight™ Luciferase Reporter Gene Assay Kit SLLU-01K

Each kit is sufficient for 1,000 assays in 96-well plate (or 4,000 assays in 384-well plate). Kit includes:

- 1 x 100mL SuperLight™ Assay Buffer
- 1 vial SuperLight™ Luciferase Reagent



Up-regulation of CRE-dependent luciferase expression by prostaglandin E2 (PGE₂) and adenylyl cyclase activator forskolin in HEK293 cells. Assay was performed in a 384-well plate.

REFERENCES:

[1]. Zhao L, Haslam DB (2005). A quantitative and highly sensitive luciferase-based assay for bacterial toxins that inhibit protein synthesis. *J Med Microbiol.* 54:1023-30.

[2]. Phippard D and Manning AM (2003) Screening for inhibitors of transcription factors using luciferase reporter gene expression in transfected cells. *Methods Mol Biol.* 225:19-23.

