

PROMEGA BRIGHT-GLO LUCIFERASE ASSAY  
(96 well plate)

Day 1: Plate cells at 7,500 cells/100  $\mu$ l/well

Day 2: Treat cells as desired for appropriate time

Day 3: Assay for luciferase activity with Promega Bright-Glo reagent

**Luciferase assay:**

1. Thaw assay buffer in room temperature water.
2. Add assay buffer to lyophilized substrate.  
(dissolved substrate is stable for 1 mo. at  $-70^{\circ}\text{C}$ )
3. Turn on luminometer and computer, open “Bright-Glo” program and edit template as desired.
4. Equilibrate cells to be tested to room temp (about 5 min).
5. Add 100  $\mu$ l substrate to each well using multipipetter.
6. Allow cells to lyse for 5 min.
7. Transfer 200  $\mu$ l lysed cells/substrate reagent to white opaque luminometer microtiter plate using multipipetter.
8. Read in luminometer (Molecular Devices)  
Bright Glo protocol:  
endpoint protocol  
Integrate:5 sec  
Preread: off  
No injections  
One 96 well plate will take about 10 min to read.

**Comments:**

The half life of the substrate is a little more than 25 min, so the assay should be processed quickly.

**Reference:** Promega Bright-Glo Luciferase Assay system

**Submitted by:** Sandy Westerheide