

## Product datasheet for **PR300009**

### Firefly & Renilla Luciferase Single Tube Assay Kit, 1000 assays

#### Product data:

**Product Type:** Luciferase Assay Kits

**Description:** Firefly & Renilla Luciferase Single Tube Assay Kit, 1000 assays

**Components:**

- 1X Passive Lysis Buffer 2.0 (ready-to-use cell lysis buffer without dilution)
- Firefly Luciferase Assay Buffer
- D-Luciferin
- Renilla Luciferase Assay Buffer
- Coelenterazine (a water soluble substrate that can be stored at -20°C with minimal evaporation)

**Features:**

- Sequentially measure firefly & Renilla activities in a single sample
- Highly sensitive & linear flash-type assay
- Easy-to-handle water-soluble substrates
- Substrate is added fresh every assay, for consistent signal over time
- Excellent performance & great value compared to other suppliers

**Assay Type:** Luminescence (flash-type), Endpoint assay

**Detection Method:** Luminometer (single-tube or microplate reader with reagent injectors)

**Summary:** The Firefly & Renilla Luciferase Single Tube Assay Kit is designed to measure Firefly and Renilla luciferase activity in the same sample with high sensitivity and linearity. Firefly luciferase activity is measured first, then Renilla Luciferase Assay Buffer 2.0 is added to the sample to simultaneously quench firefly luciferase activity and measure Renilla luciferase activity. The Renilla Luciferase Assay Buffer 2.0 quenches the firefly luciferase activity to the level of untransfected cells, allowing sequential measurement of firefly and Renilla luciferase activity in the same sample.

**Note:** This is a flash-type assay that requires luminescence to be measured immediately after adding luciferase detection reagents to your sample. It requires a single-tube luminometer or luminescence microplate reader with reagent injectors. The Passive Lysis Buffer 2.0 also can be used to dilute recombinant firefly or Renilla luciferase enzymes without the need for additional enzyme stabilizers like BSA.



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- Background:** Firefly luciferase is widely used as a reporter for studying gene regulation and function, and for pharmaceutical screening. It is a very sensitive genetic reporter due to the absence of endogenous luciferase activity in mammalian cells or tissues. Renilla luciferase has been used as a reporter gene for studying gene regulation and function in vitro and in vivo. It commonly is used in multiplex transcriptional reporter assays or as a normalizing transfection control for firefly luciferase assays.
- Storage:** Store at -80°C.
- Stability:** Store the kit at -80°C. Firefly and Renilla Assay Buffers are stable at -80°C for at least six months from date of receipt. Other components are stable at -20°C or below for at least six months from date of receipt. Kit components and stock solutions of D-Luciferin and Coelenterazine in water are stable to at least 5 freeze/thaw cycles.