

Certificate of Analysis

Product Name: Luciferase Reporter Gene Assay Kits

Catalog No.: Z5030001, Z5030002, and Z5030003

Shipping Condition: Room Temperature

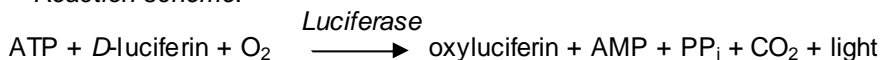
Storage Condition: Store the Reagent at -20°C and the Assay Buffer at 2-8°C

Shelf Life: 12 months from the date of receipt under proper storage conditions

Description

The Luciferase Reporter Gene Assay is based on the quantitation of luciferase expression in mammalian, yeast or E. coli cells, using luciferin and ATP as substrates. The reaction results in light production that can be conveniently measured on a luminometer.

Reaction scheme:



This bioluminescent reporter gene assay is extremely sensitive and is especially suitable for quantifying luciferase expression in recombinant cells. This ultra-sensitive, homogeneous cell-based assay only requires adding a single reagent to the cells and measuring the light intensity after a short incubation step (2 minutes). Assays can be performed in tubes, cuvettes or multi-well plates. All kit components are compatible with culture media and with all liquid handling systems. With an extended luminescence emission kinetics (half-life 40 min), the luciferase assays are especially suitable for high-throughput screening in 96-well, 384-well and 1536-well plates. In addition, the reagent provided in the kits has been formulated for maximum sensitivity, reproducibility and long shelf life. Applications for this kit include gene regulation studies and high-throughput screening of gene modulators.

Data Analysis

The light intensity (RLU) is directly proportional to the luciferase concentration. For dose-response studies, the data are plotted against compound concentration and the EC₅₀ for gene up-regulator compound and IC₅₀ for a gene down regulator compound can be determined by non-linear regression analysis using Prism or other data analysis tools.

Components

1. One Kit
2. User Manual
3. Certificate of Analysis
4. MSDS

FOR IN VITRO RESEARCH USE ONLY

APPROVED BY: 