



Cell Growth Assay Kit (Luminescence)

Product Information

Cat.No.

Kit-2047

Product Overview

The Cell Assay Kit is designed to gauge cell growth by measuring proportional changes in total cell ATP. This is a homogenous assay, which can be performed on multi-well plates by adding the reagents directly to cell growth medium in both adherent and suspension cell cultures. This makes it ideal for automated high-throughput screening. This assay has been optimized to accurately measure cell number over a broad dynamic range (100 - 2×10^5 cells) in 96-well plate format. The assay accurately monitors cell growth over time periods from 24-120 h, and the ATP detection sensitivity is from 0.1 to 1000 μM .

Size

100 assays in 96-well plates

Description

Adenosine triphosphate (ATP) plays a fundamental role in cellular energetics, metabolic regulation and cellular signaling. The quantitation of ATP can be used for a variety of biological applications. Because ATP is the energy source for almost all living organisms that rapidly degrades in the absence of viable organisms, its existence can be used to identify the presence of viable organisms. The measurement of ATP has been used for cell cytotoxicity, detection of bacteria on surfaces, quantification of bacteria in water, somatic cells in culture and food quality.

Applications

This assay has been optimized to accurately measure cell number over a broad dynamic range (100- 2×10^5 cells) in 96-well plate format, ideal for automated high-throughput screening. The assay accurately monitors cell growth over time periods from 24-120 h, and the ATP detection sensitivity is from 0.1 to 1000 μM . For cell proliferation, cell toxicity, and ATP measurement.

Storage

Keep in freezer (-20°C) and avoid exposure to light.



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Kit Components

Assay Solution I: 5 ml Assay Solution II: 5 ml Component A: 50 μ l Component B: 30 μ l

Detection method Microplate luminometer

Features & Benefits

Continuous: Homogenous assay, add-and-read assay, amenable to HTS format. Wide Linear Range: The assay generates a linear signal while measuring 100 to 200,000 cells. It is particularly suitable for determining the proliferation of fast-growing cancer cells in typical 3-5 day growth assays. Sensitive and Accurate: As low as 100 cells can be accurately quantified, and the growth curves correlate with those generated by traditional cell number counts. Robust: Excellent signal to noise (basal) ratio. Stable assay signal.
