



ATP Cell Viability Bioluminescence Assay Kit

Product Information

Cat

Kit-2269

Cat.No.

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Product Overview

Cell death (especially apoptosis) is an energy-dependent process that requires ATP. As ATP levels fall to a point where the cell can no longer perform basic metabolic functions, the cell will die. A typical apoptotic cell exhibits a significant decrease in ATP level. Therefore, loss of ATP level in cell has been used as an indicator of cell death. In contrast, cell proliferation has been recognized by increased levels of ATP. The ApoSENSOR; Cell Viability Assay Kit utilizes bioluminescent detection of the ATP levels for a rapid screening of apoptosis and cell proliferation simultaneously in mammalian cells. The assay utilizes luciferase to catalyze the formation of light from ATP and luciferin, and the light can be measured using a luminometer or Beta Counter. The assay can be fully automatic for high throughput (10 seconds/sample) and is extremely sensitive (detects 10-100 mammalian cells/well). The high sensitivity of this assay has led to many other applications for detecting ATP production in various enzymatic reactions, as well as for detecting low level bacterial contamination in samples such as blood, milk, urine, soil, and sludge.

Applications

Bioluminescent detection of the ATP level via luciferase catalyzed reaction for a rapid screening of apoptosis and cell viability in mammalian cells.

Storage

-20°C

Shipping

Gel Pack

Kit Components



ATP Cell Viability Bioluminescence Assay Kit

Nucleotide Releasing Buffer; ATP Monitoring Enzyme; Enzyme Reconstitution Buffer; ATP (MW 551)

Target Species

Mammalian

Detection method Luminometer or Beta Counter.

Features & Benefits

Simple one-step procedure; takes only 30 minutes;

Fast and convenient;

The assay can be done directly in culture plates requiring no harvest/washing/or sample preparations.

The assay can be fully automatic for high throughput (10 seconds/sample) and is highly sensitive (detects 10-100 mammalian cells/well).