

Catalog Number
TBS2027-0.5K
TBS2027-1K

Unit Size
500 Assay
1000 Assay

DESCRIPTION

Acridine orange (AO) is cell permeable dye. It permeates viable cells and binds to nucleic acids. Binding to dsDNA causes acridine orange to fluoresce green and binding to ssDNA or RNA causes it to fluoresce red.

Propidium iodide (PI) is a cell permeable dye in viable cells. Propidium iodide is taken up by nonviable cells and cells with compromised membranes. Once it binds to nucleic acids, its fluorescence increases 20-30 folds, and causes the cell to fluoresce red. Due to Förster resonance energy transfer (FRET), the PI signal absorbs the acridine orange signal in nonviable cells, ensuring no double positive results.

Tribioscience's Acridine Orange-Propidium Iodide (AO-PI) Stain is a cell viability dye mixture that causes viable nucleated cells to fluoresce green and nonviable nucleated cells to fluoresce red. AO-PI Stain can be used to assess cell viability with the automated fluorescence cell counters of the LUNA™ family.

FEATURES

- **Simplicity:** There is no requirement for additional reagents
- **Safety:** Non-radioactive assay
- **High throughput:** No wash and cell transfer steps are involved during sample test procedures.
- **Accuracy:** Absorbance measurement is proportional to the number of cells in each well.

Kit Components and Storage

Name	TBS2027-0.5K	TBS2027-1K
Kit Size	500 tests	1000 tests
AO-PI Stain	1.0 mL	2x 1.0 mL
Storage: 4°C in dark for 12 months		

APPLICATIONS

- Cell proliferation
- Drug reagents test
- Growth factors
- Cytotoxicity
- Apoptosis

ASSAY PROCEDURES

1. Mix: 2 µL Acridine Orange/Propidium Iodide Stain
2. 18 µL cell sample.
3. Count the sample with a compatible LUNA™

Excitation/emission:

acridine orange: 500/526 nm.

propidium iodide: 533/617 nm.

COMPATIBLE INSTRUMENTS

LUNA-FL™ Automated Cell Counter.
LUNA-STEM™ Automated Cell Counter.
LUNA-II YF™ Automated Yeast Cell Counter.
LUNA-FX7™ Automated Cell Counter.

RELATED PRODUCTS

Resazurin Cell Viability (TBS2001)
LDH Cytotoxicity Assay (TBS2002)
MTT Cell Viability Assay (TBS 2003)
MTS Cell Viability Assay (TBS2004)
Catalase Assay (TBS2006)
ATP Colorimetric/ Fluorometric Assay (TBS 2010)
ADP Colorimetric/Fluorometric Assay (TBS3020)
WST-8 or Cell Count Kit-8(CCK-8) (TBS2022)
Caspase-3 Colorimetric Assay (TBS2030)
BrdU Cell Proliferation Colorimetric Assay (TBS2086)
Cytochrome c Reductase Activity Assay (TBS2116)
AOPI Viability Assay for Flow Cytometry (TBS2069)

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