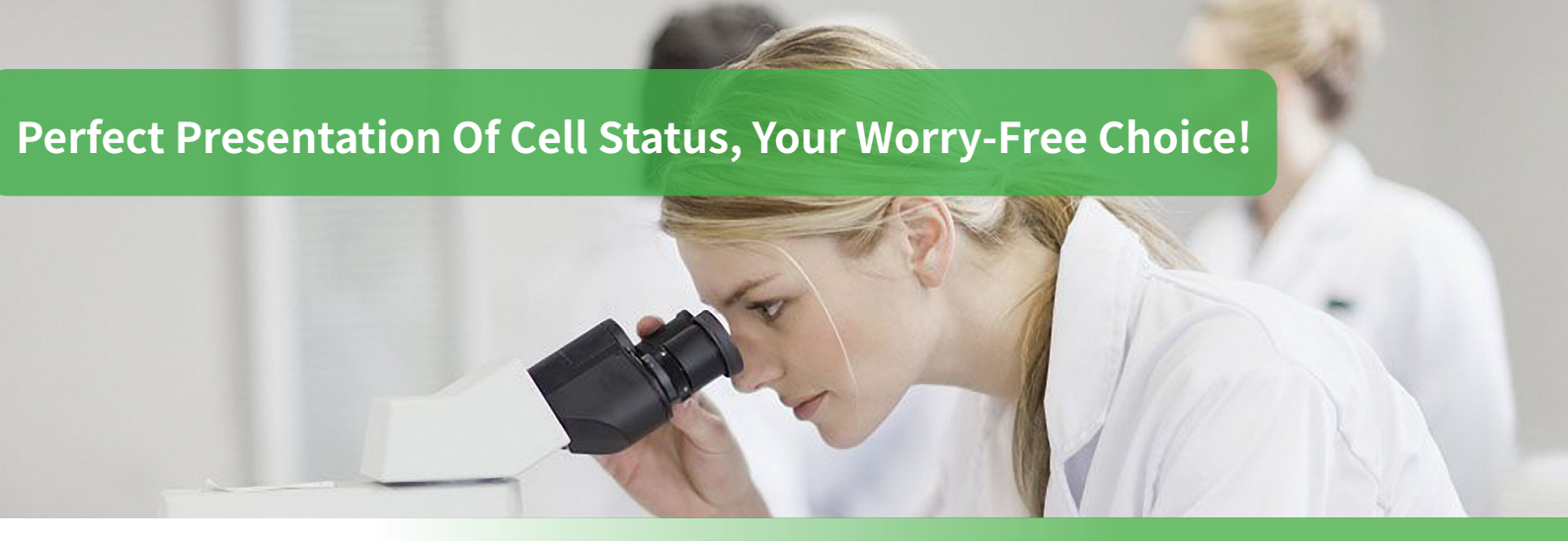


Perfect Presentation Of Cell Status, Your Worry-Free Choice!

Abbkine

Making high quality research affordable

Abbkine Scientific Co.,Ltd, founded in 2017, is headquartered in Wuhan,China.The company is committed to research, manufacturing and sales of key reagents in the field of Cell assay and Cell therapy. We presents you products that cell research users prefer including: Cell metabolism, Apoptosis (cell death), Cell proliferation, Oxidative stress, Cell damage & repair, Cell viability, Migration, invasion & chemotaxis, Stem cell research. Meet your different experimental needs and help your cytology research career.

Chekine Citation for Cell State Assay Kits

Growth rate ⩾ **300%**

Cumulative impact factor of **4000+**

Citation frequency**1500+**

Advantages and Features of Cell State Assay Kits

Abbkine Cell State Assay Kits offer comprehensive detection for cell proliferation, cytotoxicity, apoptosis, senescence, oxidative damage, and more.

Key advantages include:

- Highly Cited in Research – Frequently referenced in top-tier journals like Nature and Cell.
- Complete Components – Includes standardized positive controls for reliable results.
- Superior Quality & Stability – Utilizes fluorometric & colorimetric methods for high performance.
- Simple & Convenient – Streamlined protocols with detailed sample preparation guidelines.
- Free Trial Options Available – Multiple trial-size kits to meet exploratory research needs.

Cell proliferation application

Cell Proliferation Detection Kit

Exclusive

Cell proliferation results in many important changes, including DNA synthesis, increased cell metabolism, and proliferation-specific protein expression. Based on the next- generation AbFluor ™ fluorescence staining technology, Abbkine has developed products that accurately detect cell proliferation status directly from the DNA level, while also enabling high-throughput detection of cell proliferation status through the level of cell metabolism. The kit contains a patented proliferation-negative control, which is a perfect solution to the non-standardized proliferation test results.

Product advantages and features

- Provide an optimized negative control to exclude false positives.
- Simple, reliable, hassle-free innovation.
- Antibody-free.
- Non - denaturation steps without antibodies to maintain cell morphology and DNA integrity.
- Patented AbFluor 488 azide (Ex/Em = 501/525 nm) with good light stability and quenching resistance.

Experimental results show

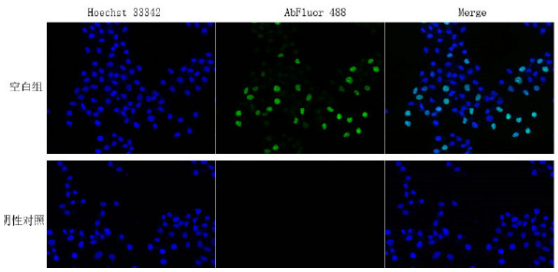


Fig.1. Proliferating Hela cells detected using Cell Proliferation EdU Image Kit (Green Fluorescence)

Ordering information

Product name	Cat. No.	Size
EdU Cell Proliferation Image Kit (Green Fluorescence) Exclusive	KTA2030	100 T/500 T
EdU Cell Proliferation Image Kit (Orange Fluorescence) Exclusive	KTA2031	100 T/500 T

Related Product Recommendation

Product name	Application	Cat. No.	Size
CFDA SE Cell Proliferation and Cell Tracking Kit	Cell proliferation/tracking	KTA6010	200 T×5/200 T×10
5(6)-CFDA, SE	Cell proliferation/tracking	BMD0066	5 mg/50 mg
Live and Dead Cell Double Staining Kit	Cell viability test	KTA1001	100 T/500 T/2000 T
Cell Counting Kit-8 (CCK-8)	Cell proliferation/toxicity test	KTA1020	1000 T/10000 T
LDH CytotoxicityAssay Kit	Cell proliferation/toxicity test	KTA1030	96T/480T
SuperKine™ Maximum Sensitivity Cell Counting Kit-8 (CCK-8)	Cell proliferation/toxicity test	BMU106	200 T/1000 T/10000 T

Cell Apoptosis Application

Cell apoptosis detection kit

Exclusive

TUNEL is the most commonly used method for detecting DNA fragmentation (apoptosis). The one-step TUNEL Apoptosis Assay Kit (Green Fluorescence) provides a complete set of reagent components and an optimized assay protocol for use with fluorescein, fluorescence microscopy, and flow cytometry. Validation sample types included: adherent cells,suspended cells, paraffin-embedded tissue sections, and frozen sections. The optical signal detection channel is FITC channel. (Ex/ Em=490 nm/520 nm)

Product advantages and features

- To provide an optimized positive control substance to solve the problem of non-standardized apoptosis detection;
- The optimized experimental scheme is suitable for fluorescence enzyme label instrument, fluorescence microscope and flow cytometer respectively.
- Easy detection based on the most widely used FITC channel (Ex/Em = 490nm/ 520nm).

Experimental results show

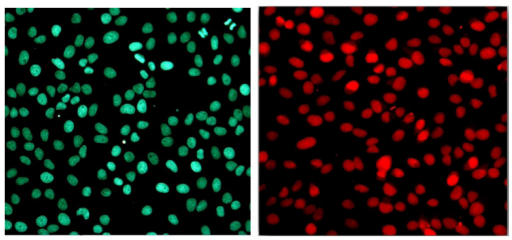


Fig 2.Fluorescence images using Abbkine TUNEL Apoptosis Detection Kit in HeLa cells

Ordering information

Product name	Cat. No.	Size
One-step TUNEL Apoptosis Assay Kit (Green Fluorescence) Exclusive	KTA2010	50 T/100T
One-step TUNEL Apoptosis Assay Kit (Orange Fluorescence) Exclusive	KTA2011	50 T/100T

Annexin V/PI Apoptosis Detection kit

Exclusive

Annexin V, is a 35–36 kDa Ca2+-dependent phospholipid-binding protein that has a high affinity for PS. Annexin V labeled with a fluorophore can identify apoptotic cells by binding to PS exposed on the outer leaflet. Propidium iodide (PI) is excluded by live cells and early apoptotic cells, but stains necrotic and late apoptotic cells with compromised membrane integrity. Thus, Annexin V matched with PI can distinguish cells with early and late apoptosis from dead cells.

Product advantages and features

- Abbkine AbFluor ™ 488 dye superior to FITC: brighter, not affected by pH, much better photostability.
- Compatible dye set designed for co-staining applications
- Suitable for flow cytometry or fluorescence microscopy.

Experimental results show

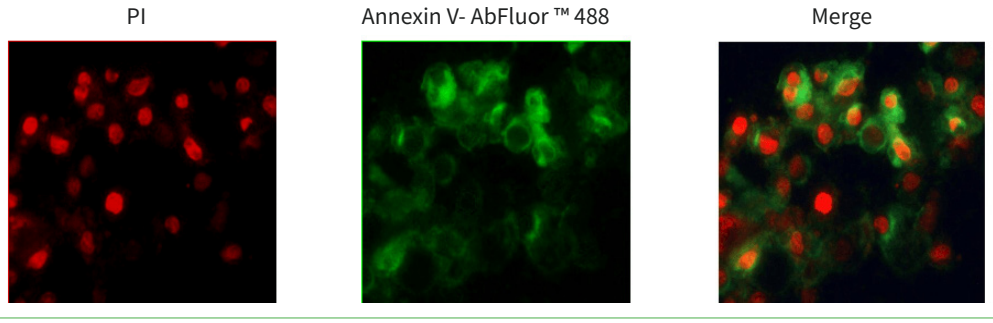


Fig.3. Hela cells were induced with camptothecin for 24 hours and stained with Annexin V- AbFluor ™ 488/PI Apoptosis Detection Kit. The cell is a late stage apoptotic/necrotic cell with both Annexin V- AbFluor ™ 488 and PI staining (green membrane with red fragmented nucleus).

Ordering information

Product name	Cat. No.	Size
Annexin V-AbFluor™ 488/PI Apoptosis Detection kit Exclusive	KTA0002	50 T/100 T
Annexin V-EGFP/PI Apoptosis Detection kit Exclusive	KTA0005	20 T/50 T/100 T

Mitochondrial Apoptosis Staining Detection Kit

Mitochondria serve as pivotal regulators in both the early-stage detection of apoptosis and the mediation of apoptotic signal transduction and execution. Consequently, mitochondrial morphology and functional integrity are widely employed as sensitive biomarkers for identifying early apoptotic events in cells

Experimental results show

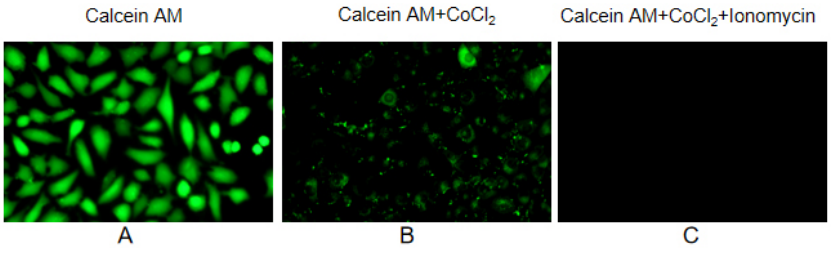


Fig 4. L929 cells was incubated with L929 cells Calcein AM (1X), and the cytoplasm including mitochondria emitted strong green fluorescence (A). After cells were further incubated with CoCl2 (1mM), the green fluorescence of Calcein in the cytoplasm was quenched by CoCl2, leaving only the green fluorescence in mitochondria (B). Cells treated with Ionomycin (0.25μM) induced a large amount of extracellular Ca2+ into the cell, excessive Ca2+ into the mitochondrial matrix, resulting in the opening of MPTP, partial release of Calcein from the mitochondria, and the introduction of cobalt ions into the mitochondria and green fluorescence quenching of Calcein (C).

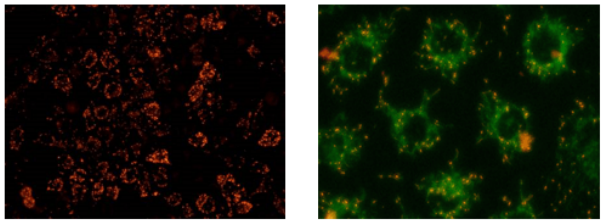


Fig 5. Hela cells stained with Abbkine Mitochondrial Membrane Potential Assay Kit (JC-1). A: Red fluorescence indicates healthy mitochondria, B: Green fluorescence indicates mitochondria in poor health (30min incubation in 20uM CCCP)

Product name	Application	Cat. No.	Size
Exclusive Mitochondrial Permeability Transition Pore Assay Kit	Detection of Mitochondrial Damage	KTA4002	50 T/100 T
Mitochondrial Membrane Potential Assay Kit (JC-1)	Cell apoptosis detection	KTA4001	20 T/100 T/500 T

DNA Damage Detection Kit

DNA damage plays a critical role in cell apoptosis and can be induced by various factors, including UV radiation, chemical agents, oxidative stress, and more. When cellular DNA is damaged, cells activate signaling pathways to determine whether to repair the damage or initiate apoptosis.

Product Advantages & Features

- Complete Components: Includes high-quality comet assay slides and electrophoresis buffer with superior anti-peeling effects.
- User-Friendly Protocol: No coverslip required—simply apply two layers of the same gel without differentiation.
- Thin Gel Layer: Enables easier and clearer imaging.

Experimental results show

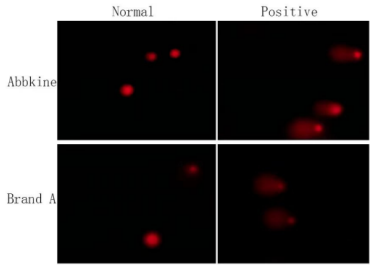
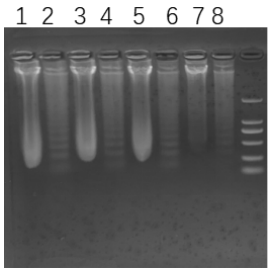


Fig 6.TUsing different DNA Damage Analysis Kits (3-well slides) to detect DNA damage in Jurkat cells .Compared to Brand A, Abbkine’ s comet assay kit demonstrated stronger fluorescence intensity and higher signal-to-noise ratio.



Line 1、3、5: untreated cells.
Line 2、4、6: treated cells with Abbkine Apoptosis DNA Ladder Extraction Kit.
Line 7、8 :treated cells with Kits from alternative brands.

Fig 7. Using different Apoptosis DNA Ladder Extraction Kit to detect DNA damage. Compared to other brand, Abbkine Apoptosis DNA Ladder Extraction Kit With Spin Column demonstrated clear apoptotic DNA laddering.

Product name	Application	Cat. No.	Size
Mitochondrial Permeability Transition Pore Assay Kit	Detection of Mitochondrial Damage	KTA4002	50 T/100 T
Mitochondrial Membrane Potential Assay Kit (JC-1)	Cell apoptosis detection	KTA4001	20 T/100 T/500 T

Related Product Recommendation

Product name	Application	Cat. No.	Size
Annexin V-AbFluor™ 405 Apoptosis Detection kit(Blue Fluorescence)	Apoptosis detection	KTA0001	50 T/100 T
Annexin V-AbFluor™ 647 Apoptosis Detection kit(Red Fluorescence)	Apoptosis detection	KTA0004	50 T/100 T
Live Cell Tracking Kit (Green Fluorescence)	Cell tracker	KTA1002	100 T/500 T/2000 T
Caspase-1 Assay Kit (Colorimetric)	Apoptosis detection	KTA3020	20 T/50 T/100 T
Caspase-2 Assay Kit (Colorimetric)	Apoptosis detection	KTA3021	20 T/50 T/100 T
Caspase-3 Assay Kit (Colorimetric)	Apoptosis detection	KTA3022	20 T/50 T/100 T
Caspase-4 Assay Kit (Colorimetric)	Apoptosis detection	KTA3023	20 T/50 T/100 T
Caspase-9 Assay Kit (Colorimetric)	Apoptosis detection	KTA3026	20 T/50 T/100 T
Fluo-4 Calcium Assay Kit	Calcium Ion Detection	KTA7010	200 T/1000 T
Cell Cycle Staining Kit	Cell Cycle and Apoptosis Assay	KTA2020	50 T/100 T
Senescence β-Galactosidase Staining Kit	Cellular Senescence Detection	KTA3030	100 T
Cell Migration Assay Kit (24 well,8μM)	Cell Behavior Detection	KTA5010	15 T/75 T
Cell Invasion Assay Kit (24 well,8μM)	Cell Behavior Detection	KTA5011	15 T/75 T

Reporter Gene Assay Applications

The Dual-Luciferase Reporter Assay Kit utilizes a bioluminescent system comprising luciferase and its substrate to enable highly sensitive and efficient detection of gene expression. **Key advantages include:**

- **High Luminescence Intensity:** ~30% stronger signal compared to leading international counterparts.
- Superior Sensitivity & Broad Linear Range:Accurately quantifies samples across a wide concentration range.
- Rapid & Stable Operation:10–15 minutes from cell lysis to final detection, with consistent readouts.
- Excellent Compatibility:Works with diverse culture media and avoids interference from endogenous cellular activity.

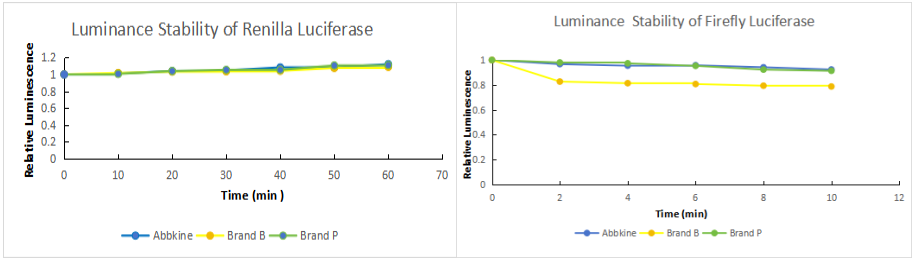


Fig 8. By comparing the products of two well-known companies on the market, it is found that the dual-luciferase reporter gene assay kit of Abbkine has both luciferases with higher fluorescence intensity and better luminescence stability within the same period of time.

Product name	Applicantions	Cat. No.	Size
Dual Luciferase Reporter Gene Assay Kit Exclusive	Reporter Gene Assay	KTA8010	100 T/1000 T
Luciferase Reporter Gene Assay Kit	Reporter Gene Assay	KTA8011	100 T/1000 T

Abbkine Scientific Ltd

Abbkine Biotechnology Co., Ltd was, founded in 2017, is headquartered in Wuhan, China. The company is committed to the research and development, manufacturing and sales of key reagents in the field of cell assay and cell therapy, and has become a key enabler of innovation in the field of cell pharmaceutical globally.

For more information, please visit Abbkine Scientific: https://www.abbkine.com
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