

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

Standardization & Comprehensive Application Tool for Cell State Detection

Abbkine presents you products that cell research users prefer, covering cell proliferation, cytotoxicity, apoptosis, senescence, oxidative damage and other detection applications. The product types include innovative and unique advantages for cell apoptosis assay Kit and cell proliferation assay Kit as well as superior quality and stable performance detection kits. Meet your different experimental needs and help your cytology research career.



The innovative and upgraded One-step TUNEL Apoptosis Assay Kit (Green Fluorescence) (KTA2010) provides a complete series of reagent components and optimized experimental protocol. It is compatible with fluorescein, fluorescence microscope, flow cytometry and other instruments. It is suitable for different tissue and cell samples and can meet the majority of cell apoptosis detection requirements. It can perfectly solve the problem of non-standardization of apoptosis detection and results.

★ Product NO: KTA2010 | Size: 50 T/100 T

■ Cell proliferation/toxicity detection

■ Cell Apoptosis/Migration/Invasion detection

■ Cell Senescence/ Oxidation detection

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.
- Antibody-free.
- Simple, reliable, hassle-free innovation.
- 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

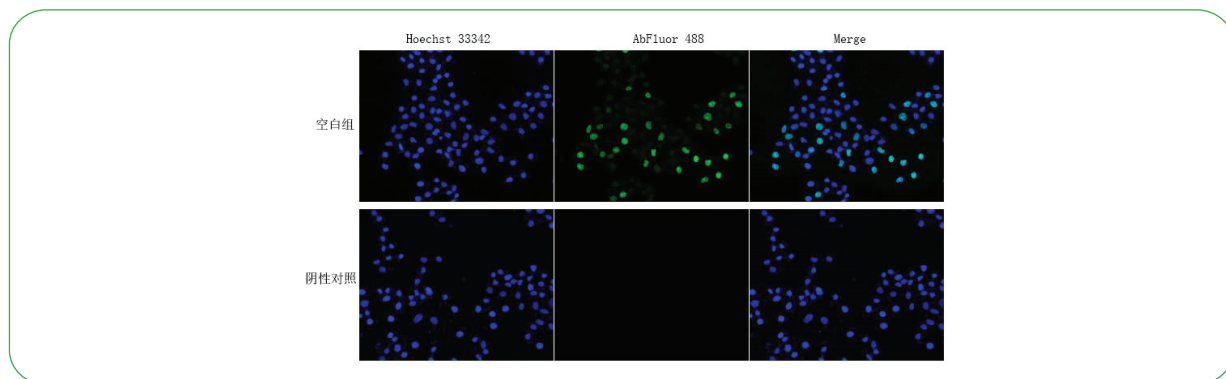


Fig.1. Proliferating HeLa cells detected using Cell Proliferation EdU Image Kit (Green Fluorescence).

Ordering information

Product name	Cat. No.	Size	Price/\$
EdU Cell Proliferation Image Kit (Green Fluorescence)	KTA2030	100 T/500 T	119/189
EdU Cell Proliferation Image Kit (Orange Fluorescence)	KTA2031	100 T/500 T	119/189

Related Product Recommendation

Product name	Application	Cat. No.	Size
Cell Counting Kit-8 (CCK-8)	Cell proliferation/toxicity test	KTA1020	1000T/10000T
LDH Cytotoxicity Assay Kit	Cell proliferation/toxicity test	KTA1030	96T/480T
SuperKine™ Maximum Sensitivity Cell Counting Kit-8 (CCK-8)	Cell proliferation/toxicity test	BMU106-EN	200 T/1000 T/10000 T
Live and Dead Cell Double Staining Kit	Cell viability test	KTA1001	100 T/500 T/2000 T
PCNA Polyclonal Antibody	WB, IHC-P, ELISA	ABP0112	100 μL
Ki 67 Monoclonal Antibody	IHC-P, IF	ABM40064	30 μL/100 μL/200 μL

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

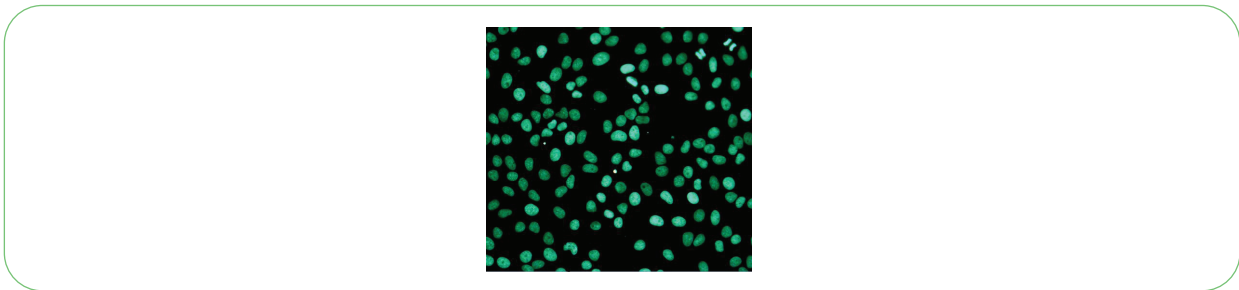


Fig.2. Fluorescence images using Abbkine TUNEL Apoptosis Detection Kit (Green Fluorescence) in HeLa cells with the treatment of 10 U/mL Dnase I for 10min.

Ordering information

Product name	Cat. No.	Size	Price/\$
One-step TUNEL Apoptosis Assay Kit (Green Fluorescence)	KTA2010	50 T/100 T	259/459
One-step TUNEL Apoptosis Assay Kit (Orange Fluorescence)	KTA2011	50 T/100 T	259/459

Annexin V/PI Apoptosis Detection kit

Annexin V, is a 35–36 kDa Ca^{2+} -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 is superior to FITC as it is brighter, not affected by pH, and has much better photostability.
- Annexin V- AbFluor™ 488: Abs/Em = 491/517 nm; PI: Abs/Em = 535/617 nm (with DNA).
- Suitable for flow cytometry or fluorescence microscopy.



The Path of Research

Experimental results show

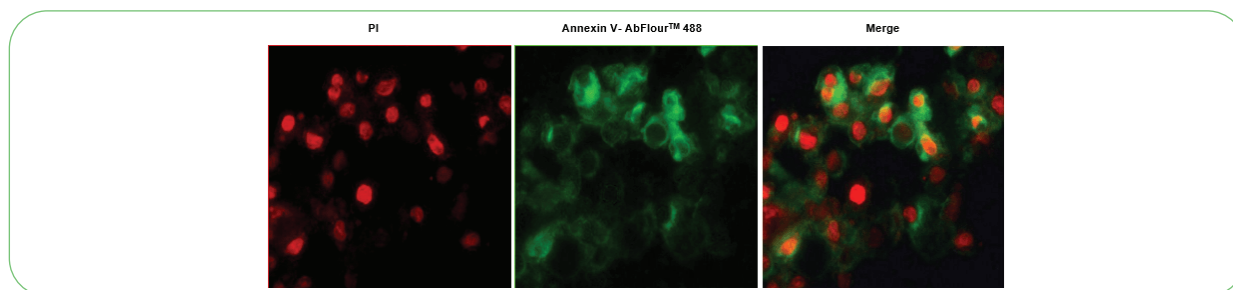


Fig.3. HeLa cells were induced with camptothecin for 24 hours and stained with Annexin V- AbFluor™ 488/PI Apoptosis Detection Kit. The cell is a late stage apoptotic/necrotic cell with both Annexin V- AbFluor™ 488 and PI staining (green membrane with red fragmented nucleus).

Ordering information

Product name	Cat. No.	Size	Price/\$
Annexin V-AbFluor™ 488/PI Apoptosis Detection kit	KTA0002	50 T/100 T	109/179
Annexin V-EGFP/PI Apoptosis Detection kit	KTA0005	20 T/50 T/100 T	49/99/169

Related Product Recommendation

Product name	Components	Cat. No.	Size
Human Annexin V/ANXA5 protein	Apoptosis detection	PRP3003	100 µg/1 mg/10 mg
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
Terminal deoxynucleotidyl transferase (TdT)	Apoptosis detection	PRP3002	40 µg/100 µg
Caspase-2 Assay Kit (Colorimetric)	Apoptosis detection	KTA3021	20 T/50 T/100 T
Caspase-4 Assay Kit (Colorimetric)	Apoptosis detection	KTA3023	20 T/50 T/100 T
Caspase-1 Assay Kit (Colorimetric)	Apoptosis detection	KTA3020	20 T/50 T/100 T
Caspase-3 Assay Kit (Colorimetric)	Apoptosis detection	KTA3022	20 T/50 T/100 T
Caspase-9 Assay Kit (Colorimetric)	Apoptosis detection	KTA3026	20 T/50 T/100 T
Mitochondrial Membrane Potential Assay Kit (JC-1)	Apoptosis detection	KTA4001	20 T/100 T/500 T
Bcl-2 Monoclonal Antibody	WB, IF, IHC-P	ABM0010	100 µL
p53 Monoclonal Antibody	WB, IF, IHC-P	ABM0016	100 µL
Caspase-8 Monoclonal Antibody	WB, IF, IHC-P	ABM0053	100 µL
Annexin V-AbFluor™ 555 Apoptosis Detection kit (Orange Fluorescence)	Apoptosis detection	KTA0003	50 T/100 T
Live and Dead Cell Double Staining Kit	Cell vitality	KTA1001	50 T/100 T/2000 T
Live Cell Tracking Kit (Green Fluorescence)	Cell tracker	KTA1002	50 T/100 T/2000 T
LDH Cytotoxicity Assay Kit	Cell cytotoxicity	KTA1030	96 T/480 T

Cell Migration/Invasion Assay Kit NEW

Cell migration is the movement of cells from one region to another along a concentration gradient driven by chemical signals such as chemokines. Many physiological/pathological processes, such as damage repair, cell differentiation, embryonic development and malignant tumor metastasis, need to be completed by cell migration. "invasion" requires cells to cross ECM/BME, in which the cells first enzymolysis to remove the ECM/BME obstruction. Cell invasion can occur during the inflammatory response of normal cells ,and the metastasis of malignant tumor cells.



Product advantages and features

- Easy to operate: ready-to-use , no need to prepare, easy to operate;
- Simple optimization experiment method: experimental procedure optimization, the method is time-saving and efficient;
- Detection of cell migration/invasion ability: convenient detection, complete data, both staining pictures and absorbance values.

Experimental results show

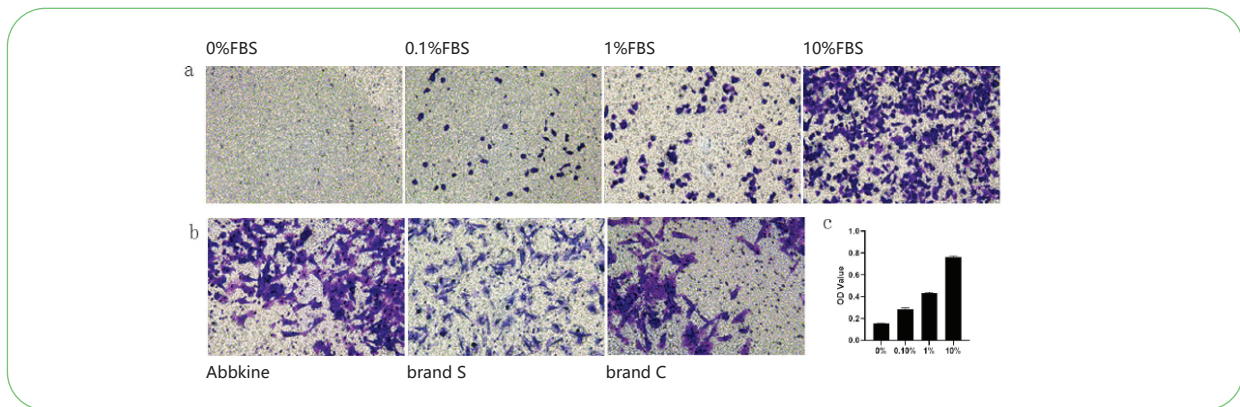


Fig.4. a-- Comparison of SW480 cells induced by different concentrations of FBS detected by cell migration analysis kit (24-well plate, 8μm); b-- Results of Abbkine Cell migration Analysis Kit (24-well plate, 8μm) compared with two other well-known brands; c-- Comparison of dye absorbance values after staining and decolorization of SW480 cells induced by different concentrations of FBS. With the increase of FBS concentration, its mobility increased gradually.

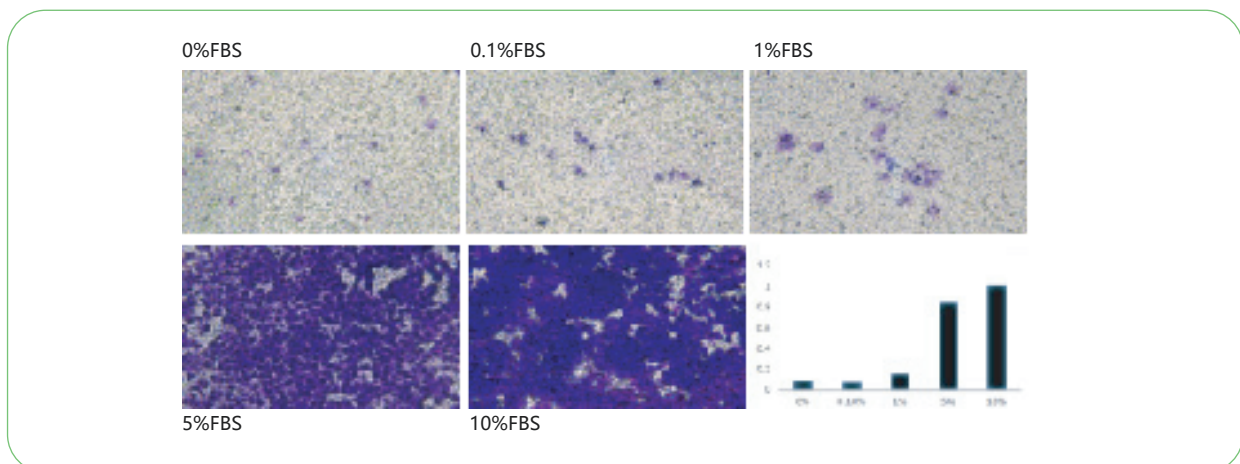


Fig.5. Cell invasion assay kit (24 well plate, 8μM) was used to detect the invasion of HT1080 cells induced by different concentrations of FBS. With the increase of FBS concentration, the invasion rate increased gradually. The rate of invasion increases gradually.

Product name	Cat. No.	component	Size
			12 T/12 T×4
Cell Migration Assay Kit (24 well,8μM)	KTA5010	24-Well Migration Plate	1/1×4
		Fixation Solution	10 mL/10 mL×4
		Staining Solution	10 mL/10 mL×4
		Elution Solution	10 mL/10 mL×4
Cell Invasion Assay Kit (24 well,8μM)	KTA5011	24-Well Invasion Plate	1/1×4
		Fixation Solution	10 mL/10 mL×4
		Staining Solution	10 mL/10 mL×4
		Elution Solution	10 mL/10 mL×4
		Matrigel	10 mL/10 mL×4

Application of Cell Senescence and Oxidative Damage

Product name	Components	Cat. No.	Size
Senescence β-Galactosidase Staining Kit	Apoptosis detection	KTA3030	100 T
CheKine™ Superoxide Dismutases (SOD) Assay Kit	SOD activity detection	KTB1030	48 T/96 T
CheKine™ Reactive Oxygen Species (ROS) Detection Assay Kit (Fluorometric)	ROS level detection	KTB1910	50 T/100 T
CheKine™ Catalase (CAT) Activity Assay Kit	CAT activity detection	KTB1040	96 T/480 T
CheKine™ Advanced Oxidation Protein Products (AOPP) Assay Kit (Colorimetric)	AOPP content detection	KTB1060	100 T
CheKine™ Glutathione Peroxidase (GSH-Px) Colorimetric Assay Kit	GSH-Px activity detection	KTB1640	48 T/96 T
CheKine™ Glutathione S-Transferase (GST) Colorimetric Assay Kit	GST activity detection	KTB1630	48 T/96 T
CheKine™ Hydrogen Peroxide (H2O2) Assay Kit	H2O2 content detection	KTB1041	96 T/480 T
CheKine™ Nitric Oxide (NO) Assay Kit	NO content detection	KTB1400	48 T/96 T
AMACR Monoclonal Antibody	WB, IF, IHC-P	ABM0015	100 μL
Peroxiredoxin 1 Monoclonal Antibody	WB, IF, IHC-P	ABM0040	100 μL
eNOS Monoclonal Antibody	WB	ABM0051	100 μL
HAO1 Monoclonal Antibody	WB, IF, IHC-P	ABM0054	100 μL

AbbKine Scientific Ltd

As the world's unique cell and protein product portfolio supplier, we provide basic tools and solutions in the fields of protein extraction and purification, immunoassays, cell culture separation, and metabolic analysis. AbbKine is committed to customer's success and excellence.

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis.

