Datasheet for ABIN955803

BrdU ELISA Kit

6 Images

Go to Product page

Overview

Quantity:	200 tests
Target:	BrdU
Method Type:	Cell ELISA
Application:	ELISA

Product Details

Sample Type:	Cell Culture Cells
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Characteristics:	The BrdU Cell Proliferation ELISA involves incorporation of BrdU into cells cultured in microtiter plates using the cell layer as the solid phase. The resultant assay is sensitive, rapid, easy to perform and applicable to high sample throughput. In addition to evaluation of cell proliferation, information such as cell number, morphology and analysis of cellular antigens can be obtained from a single culture.The BrdU Cell Proliferation ELISA involves incorporation of BrdU into cells cultured in microtiter plates using the cell layer as the solid phase. During the final 2 to 24 hours of culture BrdU is added to wells of the microtiter plate. BrdU will be incorporated into the DNA of dividing cells. To enable antibody binding to the incorporated BrdU cells must be fixed, permeabilized and the DNA denatured. This is all done in one step by treatment with Fixing Solution. BrdU Antibody is pipetted into the wells and allowed to incubate for one hour, during which time it binds to any incorporated BrdU. Unbound antibody is washed away and horseradish peroxidase (HRP)-conjugated goat anti-mouse antibody is added, which binds to the BrdU Antibody. The HRP catalyzes the conversion of the chromogenic substrate tetramethylbenzidine (TMB) from a colorless solution to a blue solution (or yellow after the

Product Details

	addition of stopping reagent), the intensity of which is proportional to the amount of incorporated BrdU in the cells. The colored reaction product is quantified using a spectrophotometer.
Components:	BrdU Reagent: 500X solution of BrdU, 15 µL Fixing Solution: 40 mL Prediluted BrdU Antibody: 20 mL of prediluted antibody Peroxidase Anti-Mouse IgG (2,000X), 15 µL of a peroxidase conjugated goat anti-mouse IgG antibody Conjugate Diluent: 25 mL Buffer for dilution of peroxidase conjugated goat anti-mouse IgG antibody TMB Substrate: 25 mL, Ready to use TMB solution Wash Buffer, 50X: Solution of buffered Tris and Surfactant, 90 mL Stop Solution: 25 mL of 2.5 N sulfuric acid
Material not included:	2-20 µL, 20-200 µL, and 200-1,000 µL precision pipettes with disposable tips Wash bottle or multichannel dispenser for washing 2 L graduated cylinder PBS (137 mM NaCl, 2.7 mM KCl, 4.3 mM Na2HPO4-7H2O, 1.4 mM KH2PO4) De-ionized or distilled H2O Spectrophotometer capable of measuring absorbance in 96-well plates using dual wavelength of 450-540 or 450- 595 nm or a single read at 450 nm. Tissue culture microtiter plate (96 well culture dish) Sterile reagent troughs Micro syringe filter (0.2 µm) Syringe.

Target Details

Target:	BrdU
Alternative Name:	BrdU Cell Proliferation (BrdU Products)
Target Type:	Chemical
Background:	Evaluation of cell cycle progression is essential for investigations in many scientific fields. Measurement of [3 H]-thymidine incorporation as cells enter S phase has long been the traditional method for the detection of cell proliferation. Subsequent quantification of [3 H]-thymidine is performed by scintillation counting or autoradiography. This technology is slow, labor intensive and has several limitations including the handling and disposal of radioisotopes

Target Details

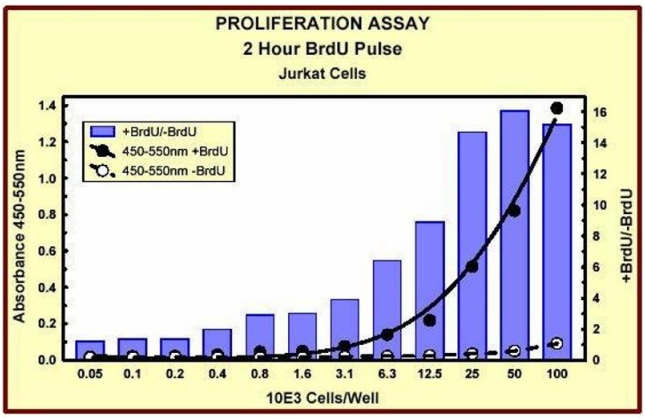
	and the necessity of expensive equipment. In an alternative method to [3 H]-thymidine uptake, the thymidine analog BrdU is used in place of [3 H]-thymidine and is incorporated into newly synthesized DNA strands of actively proliferating cells. Following partial denaturation of double stranded DNA, BrdU is detected immunochemically allowing the assessment of the population of cells, which are actively synthesizing DNA.

Application Details

Plate:	Uncoated
Restrictions:	For Research Use only

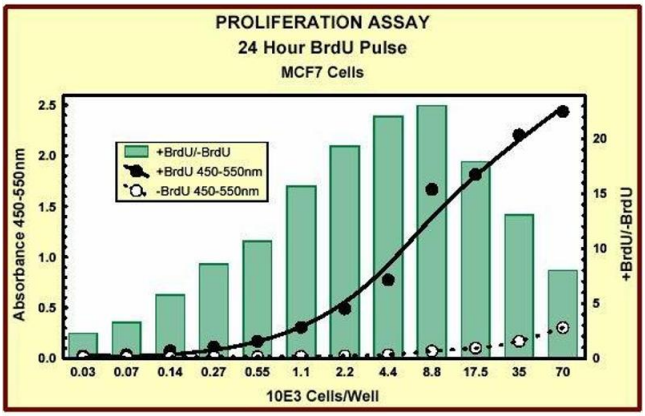
Handling

Precaution of Use:	1. Do not expose reagent to excessive light. 2. Wear disposable gloves and eye protection. 3. Do not use the kit beyond the expiration date. 4. Do not mix reagents from different kit lots. 5. Do not pipette by mouth or ingest any of the reagents. 6. The buffers and reagents used in this kit contain anti-microbial and anti-fungal reagents. Care should be taken to prevent direct contact with these products. 7. Do not smoke, eat, or drink when performing the assay or in areas where samples or reagents are handled. 8. Human samples may be contaminated with infectious agents. Do not ingest, expose to open wounds, or breathe aerosols. Dispose of samples properly.
Storage:	4 °C
Storage Comment:	Store all kit components at 4°C. Before first use, remove the Fixing Solution and place at RT for at least 4 hours prior to use. Precipitates that may form should go back into solution.



ELISA

Image 1.



ELISA

Image 2.

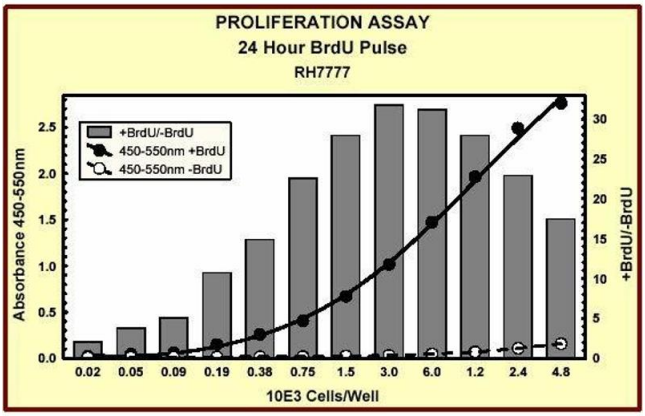


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Image 3.

Please check the product details page for more images. Overall 6 images are available for ABIN955803.