abcam

Product datasheet

BrdU Cell Proliferation ELISA Kit (colorimetric) ab126556

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Overview

Product name BrdU Cell Proliferation ELISA Kit (colorimetric)

Detection method Colorimetric

Sample type Adherent cells, Suspension cells

Assay type Sandwich (qualitative)

Sensitivity < 40 cells/well

Assay time 2h 30m

Assay duration Multiple steps standard assay

Product overview BrDU Cell proliferation ELISA kit (ab126556) is an indirect ELISA kit for the detection of BrdU

incorporation into newly synthesized DNA of actively proliferating cells. It 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. Detector anti-BrdU monoclonal 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-conjugated goat anti-mouse antibody is added, which binds to the Detector Antibody.

The horseradish peroxidase catalyzes the conversion of the chromogenic substrate tetramethylbenzidine (TMB) from a colorless solution to a blue solution (or yellow after the 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.

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.

Store kit at +4°C immediately upon receipt except for the Prediluted Anti-BrdU Detector Antibody and Peroxidase Goat anti-mouse IgG (2000X) which must be stored at -20°C.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of

products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH

Notes

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Microplate

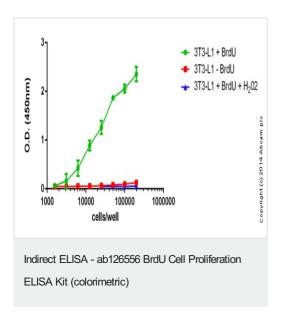
Properties

Storage instructions

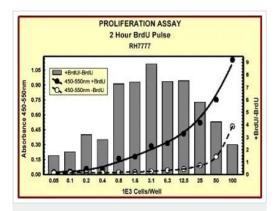
Store at +4°C. Please refer to protocols.

Components	200 tests
500X BrdU Reagent	1 x 15μl
Conjugate Diluent	1 x 25ml
Fixing Solution	2 x 20ml
Peroxidase Goat anti-mouse IgG (2000X)	1 x 15μl
Plate wash concentrate (50X)	1 x 90ml
Prediluted anti-BrdU detecting antibody	1 x 20ml
Stop Solution	1 x 25ml
TMB Substrate	1 x 25ml

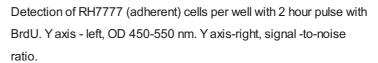
Images

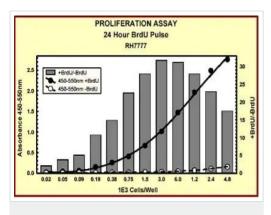


Cell proliferation measured in fibroblasts showing cell amounts vs. optical densities



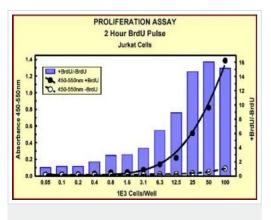
Indirect ELISA - BrdU Cell Proliferation ELISA Kit (colorimetric) (ab126556)





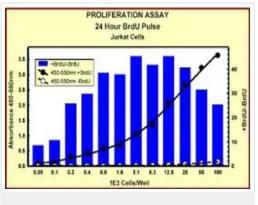
Indirect ELISA - BrdU Cell Proliferation ELISA Kit (colorimetric) (ab126556)

Detection of RH7777 (adherent) cells per well with 24 hour pulse with BrdU. Yaxis - left, OD 450-550 nm. Yaxis-right, signal-to-noise ratio.



Indirect ELISA - BrdU Cell Proliferation ELISA Kit (colorimetric) (ab126556)

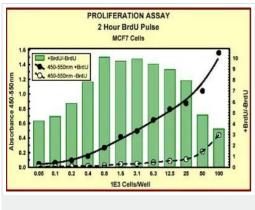
Detection of Jurkat cells (non-adherent) per well with 2 hour pulse with BrdU. Yaxis - left, OD 450-550 nm. Yaxis-right, signal-to-noise ratio.



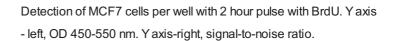
Indirect ELISA - BrdU Cell Proliferation ELISA Kit

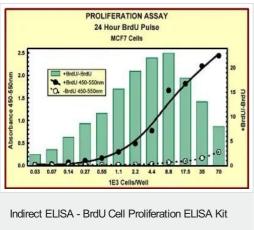
(colorimetric) (ab126556)

Detection of Jurkat cells (non-adherent) per well with 24 hour pulse with BrdU. Yaxis - left, OD 450-550 nm. Yaxis-right, signal-to-noise ratio.



Indirect ELISA - BrdU Cell Proliferation ELISA Kit (colorimetric) (ab126556)





(colorimetric) (ab126556)

Detection of MCF7 cells per well with 24 hour pulse with BrdU. Y axis - left, OD 450-550 nm. Y axis-right, signal-to-noise ratio.

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