

THE™ BrdU Antibody, mAb, Mouse

Cat. No.: A01650-100

Size: 100 µg

Synonyms: Bromodeoxyuridine Antibody, mAb, Mouse;
Bromo-deoxyuridine Antibody, mAb, Mouse

Description:

Bromodeoxyuridine (5-Bromo-2-Deoxyuridine, BrdU) is an analogue of thymidine that can be incorporated into newly synthesized DNA at the S phase of the cell cycle, thus BrdU is a common reagent used for both cell proliferation assays and for the detection of apoptotic cells. The amount of BrdU incorporated into the DNA is dependent on time exposed to BrdU and the rate of cell division. Detection of incorporated BrdU is useful to determine cell cycle kinetics, assessing cell proliferation in the presence of growth factors or cytotoxic drugs and demonstrating sister chromatid exchange.

GenScript THE™ BrdU Antibody, mAb, Mouse is produced from the hybridoma resulting from fusion of Sp2/0 myeloma and lymphocytes obtained from mouse immunized with BrdU conjugated to KLH.

Immunogen: BrdU conjugated to KLH

Host: Mouse

Conjugation: Unconjugated

Fusion Partner:

Spleen cells were fused with SP2/0-Ag14 mouse myeloma cells

Formulation:

0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02% sodium azide

Clone: 3E2D3

Ig Subclass: IgG1, κ

Specificity: The specificity of the antibody has been tested by competitive ELISA. Binding was inhibited by 5-bromo-2'-deoxyuridine (BrdU), 5-chloro-2'-deoxyuridine (CldU) and 5-iodo-2'-deoxyuridine (IdU). No cross-reactivity was observed with 5-fluoro-2'-deoxyuridine (FdU) and thymidine (T).

Purification: Protein A affinity column

Applications:

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.015- 0.05 µg/ml

Flow cytometry: 1-3 µg for 1 x 10⁶ cells

ICC/IF: 1-3 µg/ml

Other applications: user-optimized

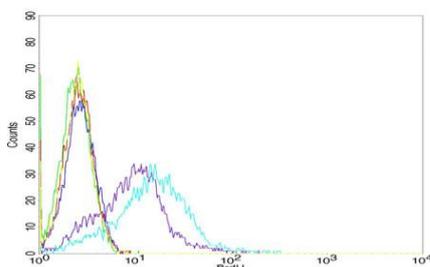
Reconstitution:

Reconstitute the lyophilized antibody with deionized water (or equivalent) to a final concentration of 0.5 mg/ml.

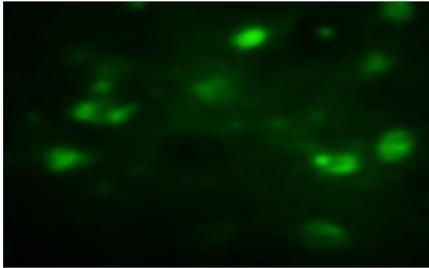
Storage:

The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.

Example

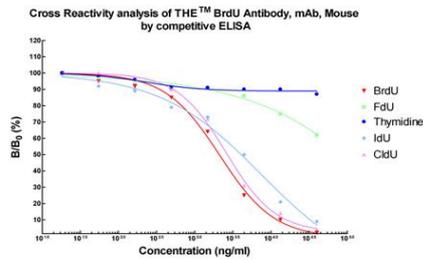


Flow cytometric analysis of untreated or BrdU incorporated HeLa cells using GenScript THE™ BrdU Antibody, mAb, Mouse (yellow and cyan, respectively), Competitor A Mouse Anti-BrdU mAb (blue and purple, respectively), or mouse IgG1 isotype control (green and red, respectively).

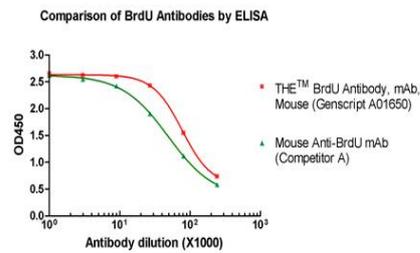


Immunocytochemistry/Immunofluorescence analysis of HeLa cells incorporated with BrdU using THE™ BrdU Antibody, mAb, Mouse (GenScript, A01650)

The image was developed with FITC conjugated Goat Anti-Mouse IgG.



Competitive ELISA analysis of Cross Reactivity using THE™ BrdU Antibody, mAb, Mouse (GenScript, A01650)



Comparison of THE™ BrdU Antibody, mAb, Mouse (GenScript, A01650) with Mouse Anti-BrdU mAb (Competitor A) by indirect ELISA.