Anti-BrdU FITC (Discontinued; please refer to alternative product Cat. No. 11-5071)

Catalog Number: 11-6071
Also known as: 5-bromodeoxyuridine

Product Information

Contents: Anti-BrdU FITC (Discontinued; please refer to alternative product Cat. No. 11-5071)
Catalog Number: 11-6071
Clone: PRB-1
Concentration: 5 μL (1 ug)
Host/Isotype: Mouse IgG1

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.
Batch Code: Refer to vial
Use By: Refer to vial
Caution, contains Azide

Description

The PRB-1 antibody reacts with 5-Bromodeoxyuridine (BrdU). BrdU is a derivative of uridine that can be incorporated into DNA in place of thymidine during the S-phase of the cell cycle. Anti-BrdU can then be used to identify cells that undergo DNA synthesis during exposure to BrdU. This proportion of cells can be identified by either flow cytometric analysis or fluorescence microscopy. PRB-1 also reacts with iodouridine.

Applications Reported

This antibody can be used for preparation of BrdU-pulsed and permeabilized cells for flow cytometric analysis.

Applications Tested

The PRB-1 antibody has been tested for detection of apoptotic cells in flow cytometric analysis. This can be used at less than or equal to 5 μl (1 μg) per 100 μl blood (per million cells). It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

BrdU labeling and staining with anti-BrdU antibody:

1. Label dividing cells with 10 μM BrdU for 45 min at 37°C.
2. Following the incubation, harvest the cells and wash once with 1X PBS.
3. Stain surface molecules according to the Surface Staining Protocol.
4. Wash in cold Flow Cytometry Staining Buffer or 1X PBS.
5. Resuspend the cell pellet by pulse vortexing. Then add 1 ml of freshly prepared Foxp3 Fixation/Permeabilization solution (cat. 00-5521) to each sample. Pulse vortex again.
6. Incubate for 30 to 60 minutes at 4°C in the dark.
7. Wash once by adding 2 ml 1X Permeabilization Buffer (made from 10X Permeabilization Buffer included in the Foxp3 buffer Set) followed by centrifugation. Decant the supernatant.
8. Resuspend the cell pellet with 100 μL Flow Cytometry Staining Buffer containing 30 μg of DNase I.
9. Incubate for 1 hr at 37°C and then wash.
10. Stain cells with anti-BrdU antibody for 30 min to 1 hr and then wash.
11. If necessary, stain with secondary antibody for 30 min and then wash.
12. Analyze the samples.

References

Beisker W, Dolbeare F, Gray JW. An improved immunocytochemical procedure for high-sensitivity detection of
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Related Products
11-4714 Mouse IgG1 K Isotype Control FITC (P3.6.2.8.1)