BrdU Monoclonal Antibody (BU20A), PerCP-eFluor™ 710, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Chemical
Published Species	Chemical
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	BU20A
Conjugate	PerCP-eFluor™ 710
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_11151325

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.06 µg)/test	12 Publications

Product Specific Information

Description: This Bu20a monoclonal 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 have undergone DNA synthesis during BrdU treatment.

For staining for flow cytometric analysis, we recommend the use of the BrdU Staining Buffer Set (cat. 00-5525) and protocol.

Applications Reported: This BU20A antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This BU20A antibody has been pre-titrated and tested by flow cytometric analysis of BrdU-pulsed mouse splenocytes using the Foxp3/Transcription Factor Buffer Set (cat. 00-5523) and protocol or the BrdU Staining Buffer Set (cat. 00-5525) and protocol. This can be used at 5 µL (0.06 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

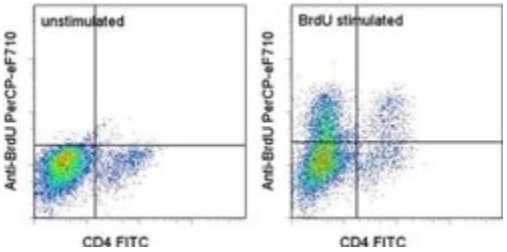
PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Our testing indicates that PerCP-eFluor® 710 conjugated antibodies are stable when stained samples are exposed to freshly prepared 2% formaldehyde overnight at 4°C, but please evaluate for alternative fixation protocols. BrdU labeling and staining with the 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 Buffer (cat. 00-5521) to each sample. pulse vortex again.6. Incubate for 30 to 60 minutes at 2-8°C in the dark.7. Wash once with cold Flow Cytometry Staining Buffer 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.10. Analyze the samples.

Excitation: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For BrdU Monoclonal Antibody (BU20A), PerCP-eFluor™ 710, eBioscience™



BrdU Antibody (46-5071-42) in Flow
Anti-CD3/CD28 (Product # 16-0031-82, 16-0281)-stimulated mouse splenocytes either unlabeled (left) or labeled with BrdU (right) were surface stained with Anti-Mouse CD4 FITC (Product # 11-0041-82). These cells were then stained intracellularly with Anti-BrdU PerCP-eFluor® 710 using the BrdU Staining Kit for Flow Cytometry PerCP-eFluor® 710 and protocol. Total viable cells were used for analysis.

View more figures on thermofisher.com

12 References

Flow Cytometry (12)

Cell research

Myofiber necroptosis promotes muscle stem cell proliferation via releasing Tenascin-C during regeneration.

"Published figure using BrdU monoclonal antibody (Product # 46-5071-42) in Flow Cytometry"

Authors: Zhou S,Zhang W,Cai G,Ding Y,Wei C,Li S,Yang Y,Qin J,Liu D,Zhang H,Shao X,Wang J,Wang H,Yang W, Wang H,Chen S,Hu P,Sun L

Species
Chemical

Dilution
Not Cited

Year
2020

Cell death & disease

ASH2L drives proliferation and sensitivity to bleomycin and other genotoxins in Hodgkin's lymphoma and testicular cancer cells.

"Published figure using BrdU monoclonal antibody (Product # 46-5071-42) in Flow Cytometry"

Authors: Constantin D,Widmann C

Species
Chemical

Dilution
Not Cited

Year
2020

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