BrdU Monoclonal Antibody (BU20A), APC, 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), APC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	BU20A
Conjugate	APC
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_11040534

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	22 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 intracellular staining and flow cytometric analysis of BrdU-labeled 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. Please see Best Protocols Section (Staining intracellular Antigens for Flow Cytometry) for staining protocol (refer to Protocol B: One-step protocol for intracellular (nuclear) proteins). This can be used at 5 µL (0.125 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.

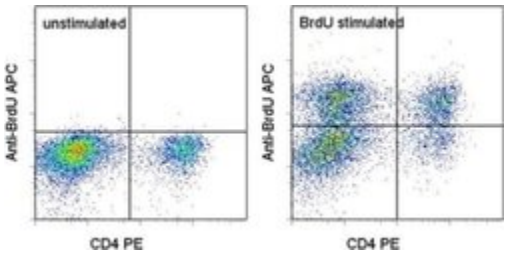
BrdU labeling and staining with the Anti-BrdU antibody:1. Label dividing cells with 10 µM BrdU for 45 min at 37°C.2. Following the incubation, harvest the cells and wash once with 1X PBS.3. Stain surface molecules according to the Surface Staining Protocol.4. Wash in cold Flow Cytometry Staining Buffer 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: 633-647 nm; Emission: 660 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For BrdU Monoclonal Antibody (BU20A), APC, eBioscience™



BrdU Antibody (17-5071-42) 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 PE (Product # 12-0041-82). These cells were then stained intracellularly with Anti-BrdU APC using the BrdU Staining Kit for Flow Cytometry APC and protocol. Total viable cells were used for analysis.

View more figures on thermofisher.com

24 References

Immunocytochemistry (2)

Cell reports

PD-L1 recruits phospholipase C and enhances tumorigenicity of lung tumors harboring mutant forms of EGFR.

"17-5071-42 was used in Immunocytochemistry to portray PD-L1 as a molecular amplifier of EGFR signaling and improve the understanding of the resistance of EGFR+ tumors to immunotherapy."

Authors: Ghosh S,Nataraj NB,Noronha A,Patkar S,Sekar A,Mukherjee S,Winograd-Katz S,Kramarski L,Verma A, Lindzen M,Garcia DD,Green J,Eisenberg G,Gil-Henn H,Basu A,Lender Y,Weiss S,Oren M,Lotem M,Geiger B,Ruppin E, Yarden Y

Species
Chemical

Dilution
Not Cited

Year
2021

Diabetes

Soluble factors secreted by T cells promote -cell proliferation.

"17-5071 was used in Immunohistochemistry to study the role of soluble factors secreted from T cells to enhance pancreatic -cell proliferation."

Authors: Dirice E,Kahraman S,Jiang W,El Ouaamari A,De Jesus DF,Teo AK,Hu J,Kawamori D,Gaglia JL,Mathis D, Kulkarni RN

Species
Chemical

Dilution
Not Cited

Year
2014

Flow Cytometry (22)

Translational oncology

Gain-of-function hot spot mutant p53^{R248Q} regulation of integrin/FAK /ERK signaling in esophageal squamous cell carcinoma.

"17-5071 was used in Flow cytometry/Cell sorting to identify a novel GoF mechanism through which a specific p53 mutant exerts oncogenic features and contributes to ESCC tumorigenesis."

Authors: Yu VZ,So SS,Lung ML

Species
Chemical

Dilution
Not Cited

Year
2021

Cell research

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

"Published figure using BrdU monoclonal antibody (Product # 17-5071-42) 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

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More applications with references on thermofisher.com