# BrdU Monoclonal Antibody (BU20A), FITC, 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), FITC, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | BU20A |
| Conjugate | FITC |
| Form | Liquid |
| Concentration | 5 µL/Test |
| Purification | Affinity chromatography |
| Storage buffer | PBS, pH 7.2, with 0.2% BSA |
| Contains | 0.09% sodium azide |
| Storage conditions | 4° C, store in dark, DO NOT FREEZE! |
| RRID | AB_11042627 |

| Applications | Tested Dilution | Publications |
|---|---|---|
| Immunocytochemistry (ICC/IF) | - | 5 Publications |
| Flow Cytometry (Flow) | 5 µL (1 µg)/test | 33 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 and immunohistology staining of frozen tissue sections.

Applications Tested: This BU20A antibody has been tested by intracellular staining and flow cytometric analysis of BrdU-labeled mouse splenocytes using the Foxp3/Transcription Buffers (cat. 00-5521) 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 5µL (1 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

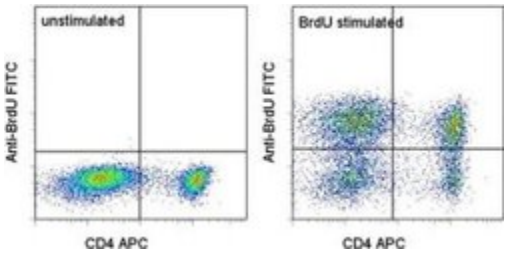
BrdU labeling and staining with anti-BrdU antibody:1. Label dividing cells with 10 µM BrdU for 45 min at 37°C.2. Following the

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 Buffer (cat. 00-5523) 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: 520 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

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




**BrdU Antibody (11-5071-42) 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 APC (Product # 17-0041-82). These cells were then stained intracellularly with Anti-BrdU FITC using the BrdU Staining Kit for Flow Cytometry FITC and protocol. Total viable cells were used for analysis.

**View more figures on thermofisher.com**

## 38 References

### Immunocytochemistry (5)

**Cell death & disease**

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

"11-5071 was used in Immunocytochemistry to identify ASH2L, a core component of the H3K4 methyl transferase complex, as a protein required for bleomycin sensitivity in L1236 Hodgkin lymphoma."

Authors: Constantin D,Widmann C

**Species**
Chemical

**Dilution**
Not Cited

**Year**
2020

**Journal of cell science**

**A non-catalytic function of PI3K drives smooth muscle cell proliferation after arterial damage.**

"11-5071 was used in Immunocytochemistry-Immunofluorescence to provide evidence for a kinase-independent role of PI3K in arterial remodeling and reveal novel strategies targeting the docking function of PI3K for the treatment of cardiovascular diseases."

Authors: Lupieri A,Blaise R,Ghigo A,Smirnova N,Sarthou MK,Malet N,Limon I,Vincent P,Hirsch E,Gayral S,Ramel D, Laffargue M

**Species**
Chemical

**Dilution**
Not Cited

**Year**
2020

View more ICC/IF references on thermofisher.com

### Flow Cytometry (33)

**Cell research**

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

"11-5071 was used in Flow cytometry/Cell sorting to indicate that necroptosis plays a key role in promoting MuSC proliferation to facilitate muscle regeneration."

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.**

"11-5071 was used in Immunocytochemistry to identify ASH2L, a core component of the H3K4 methyl transferase complex, as a protein required for bleomycin sensitivity in L1236 Hodgkin lymphoma."

Authors: Constantin D,Widmann C

**Species**
Chemical

**Dilution**
Not Cited

**Year**
2020

View more Flow references on thermofisher.com

### More applications with references on thermofisher.com