

PE anti-BrdU Antibody

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| Catalog# / Size | 364115 / 25 tests 364116 / 100 tests |
| Clone | 3D4 |
| Regulatory Status | RUO |
| Other Names | 5-bromodeoxyuridine, bromodeoxyuridine |
| Isotype | Mouse IgG1, κ |
| Description | BrdU is a uridine derivative and a structural analog of thymidine, which can be incorporated into DNA during the S-phase of a cell cycle as a substitute for thymidine. Cells can be pulse-labeled with BrdU and analyzed with antibodies against BrdU to determine the proportion of cells in the S-phase of the cell cycle during a given interval. |

Product Details

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| Antibody Type | Monoclonal |
| Host Species | Mouse |
| Immunogen | Iodouridine-conjugated ovalbumin |
| Formulation | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA) |
| Preparation | The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. |
| Concentration | Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.) |
| Storage & Handling | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze. |
| Application | ICFC - Quality tested |
| Recommended Usage | Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. |
| Excitation Laser | Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm) |
| Application Notes | Additional reported applications (for the relevant formats) include: immunohistochemistry and fluorescence microscopy. |
| Application References | <ol style="list-style-type: none">1. Dolbeare F, <i>et al.</i> 1983. <i>Proc. Natl. Acad. Sci. USA</i> 80:5573.2. Hirota K, <i>et al.</i> 2007. <i>J. Exp. Med.</i> 204:41.3. Godebu E, <i>et al.</i> 2008. <i>J. Immunol.</i> 181:1798.4. Waskow C, <i>et al.</i> 2008. <i>Nat. Immunol.</i> 9:676. |
| Product Citations | <ol style="list-style-type: none">1. Browning LM, <i>et al.</i> 2020. <i>Cell Rep.</i> 33:108219. PubMed |
| RRID | AB_2814316 (BioLegend Cat. No. 364115) AB_2814317 (BioLegend Cat. No. 364116) |

Antigen Details

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| Structure | Uridine derivative that can be incorporated into DNA and substitute thymidine residues. |
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| Distribution | Cells can be pulse-labeled with BrdU, which will be incorporated into DNA during the cell cycle's synthesis phase. |
| Function | The antibody against BrdU can be used to identify cells undergoing DNA replication during the BrdU incorporation period. |
| Biology Area | Cell Biology, Cell Cycle/DNA Replication, Immunology |
| Molecular Family | Nuclear Markers |
| Antigen References | <ol style="list-style-type: none"> 1. Barker JM, <i>et al.</i> 2013. <i>PLoS One</i> 8:e63692. 2. Duque A and Rakic P. 2011. <i>J. Neurosci.</i> 31:15205. 3. Robbins S, <i>et al.</i> 2011. <i>J. Vis. Exp.</i> 55:2855. 4. Broekhuizen CA, <i>et al.</i> 2010. <i>Infect Immun.</i> 78:954. 5. van der Wath RC, <i>et al.</i> 2009. <i>PLoS One</i> 4:e6972. 6. Dolbeare F, <i>et al.</i> 1985. <i>Cytometry</i> 6:521. 7. Gratzner HG. 1982. <i>Science</i> 218:474. |
| Gene ID | NA |

Related Protocols

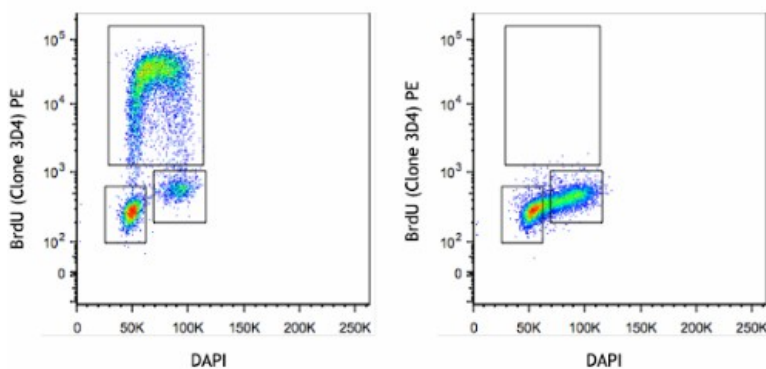
[Anti-BrdU Staining Using 70% Ethanol and 2N HCL](#)

[Anti-BrdU Staining Using DNase with Surface and Fluorescent Proteins](#)

Other Formats

Purified anti-BrdU, Alexa Fluor® 488 anti-BrdU, FITC anti-BrdU, Alexa Fluor® 647 anti-BrdU, PerCP/Cyanine5.5 anti-BrdU, Phase-Flow™ FITC BrdU Kit, Phase-Flow™ Alexa Fluor® 647 BrdU Kit, PE anti-BrdU, Alexa Fluor® 700 anti-BrdU, APC anti-BrdU, PE/Cyanine7 anti-BrdU

Product Data



Ramos cell line was pulsed with BrdU for 1 hour (left panel) or without (right panel) and then stained with anti-BrdU (clone 3D4) PE according to BioLegend BrdU staining procedure. Cells were subsequently stained with 1 µg of DAPI for DNA analysis.

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