

TECHNICAL DATA SHEET

CyFlow™ BrdU PE Clone Bu20a

REF CL205376

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	5-bromodeoxyuridine
Alternative Names	—
Clone	Bu20a
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	n/a
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	5-bromodeoxyuridine conjugated to BSA

Specificity

The mouse monoclonal antibody Bu20a reacts specifically with 5-bromodeoxyuridine (BrdU) incorporated into DNA during S-phase of a cell cycle. It is useful for detecting proliferating cells by flow cytometry or immunohistochemistry staining.

Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: info@sysmex-partec.com

Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

5-bromodeoxyuridine (BrdU) is a thymidine analog which is selectively incorporated into the DNA of proliferating cells to provide a marker for the DNA being replicated. The number of proliferating cells can then be detected in cell lysates, tissue sections or suspensions using an antibody specific for the BrdU.

References

- Magaud JP, Sargent I, Clarke PJ, Ffrench M, Rimokh R, Mason DY: Double immunocytochemical labeling of cell and tissue samples with monoclonal anti-bromodeoxyuridine. J Histochem Cytochem. 1989 Oct; 37(10):1517-27. < PMID: 2476478 >
- Muskhelishvili L, Latendresse JR, Kodell RL, Henderson EB: Evaluation of cell proliferation in rat tissues with BrdU, PCNA, Ki-67(MIB-5) immunohistochemistry and in situ hybridization for histone mRNA. J Histochem Cytochem. 2003 Dec; 51(12):1681-8. < PMID: 14623936 >
- Martín CA, Surur JM, García MN, Corrons F, Badrán AF: Comparative study of DNA synthesis and nucleolar organizer regions of sinusoid littoral cells in mouse regenerating liver. Biocell. 2005 Apr; 29(1):33-8. < PMID: 15954465 >
- Shih CH, Whalen BA, Goto Y, Hogg JC, van Eeden SF: Flow cytometric method for enumeration and characterization of newly released polymorphonuclear leukocytes from the bone marrow using 5'-bromo-2'-deoxyuridine. Am J Physiol Cell Physiol. 2005 Sep; 289(3):C757-65. < PMID: 15857903 >

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- Pajalunga D, Mazzola A, Salzano AM, Biferi MG, De Luca G, Crescenzi M: Critical requirement for cell cycle inhibitors in sustaining nonproliferative states. J Cell Biol. 2007 Mar 12; 176(6):807-18. < PMID: 17353358 >
- Lagares A, Li HY, Zhou XF, Avendaño C: Primary sensory neuron addition in the adult rat trigeminal ganglion: evidence for neural crest glio-neuronal precursor maturation. J Neurosci. 2007 Jul 25; 27(30):7939-53. < PMID: 17652585 >
- Yatera K, Hsieh J, Hogg JC, Tranfield E, Suzuki H, Shih CH, Behzad AR, Vincent R, van Eeden SF: Particulate matter air pollution exposure promotes recruitment of monocytes into atherosclerotic plaques. Am J Physiol Heart Circ Physiol. 2008 Feb; 294(2):H944-53. < PMID: 18083905 >
- O'Driscoll M, Jeggo PA: CsA can induce DNA double-strand breaks: implications for BMT regimens particularly for individuals with defective DNA repair. Bone Marrow Transplant. 2008 Jun; 41(11):983-9. < PMID: 18278071 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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