

Monoclonal Antibody to Bromodeoxyuridine (BrdU) - Purified

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| Catalog No.: | BM6048P |
| Quantity: | 0.1 mg |
| Concentration: | 1.0 mg/ml |
| Background: | The immunocytochemical detection of bromodeoxyuridine (BrdU) incorporated into DNA is a powerful tool to study the cytokinetics of normal and neoplastic cells. In vitro or in vivo labeling of tumor cells with the thymidine analogue BrdU and the subsequent detection of incorporated BrdU with specific anti-BrdU monoclonal antibodies is an accurate and comprehensive method to quantitate the degree of DNA-synthesis. BrdU is incorporated into the newly synthesized DNA of the S-phase cells and can thus provide an estimate for the fraction of cells in S-phase. Also dynamic proliferative information (such as the S-phase transit rate and the potential doubling time) can be obtained, by means of bivariate BrdU/DNA flow cytometric analysis. |
| Host / Isotype: | Mouse / IgG1 |
| Clone: | IIB5 |
| Immunogen: | IIB5 is a mouse monoclonal IgG1 antibody derived by fusion of SP2/0-Ag14 mouse myeloma cells with spleen cells from a BALB/c mouse intraperitoneally immunized with BrdU conjugated to bovine serum albumin. |
| Format: | State: Liquid purified IgG fraction. Buffer System: PBS with 0.09% Sodium Azide as preservative. |
| Applications: | This antibody is suitable for Flow cytometry and Immunohistochemistry on frozen and paraffin-embedded tissues. <u>Recommended dilutions:</u> 1/100-1/200 for Flow cytometry, and for Immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user. |
| Specificity: | IIB5 reacts with bromodeoxyuridine also when incorporated into nuclear DNA. |
| Storage: | Store the antibody (undiluted) at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freeze-thaw cycles. Shelf life: One year from despatch. |
| General References: | 1. Schutte, B., Reynders, M. M., van Assche, C. L., Hupperets, P. S., Bosman, F. T., and Blijham, G. H. (1987). An improved method for the immunocytochemical detection of bromodeoxyuridine labeled nuclei using flow cytometry, <i>Cytometry</i> 8, 372-6. 2. Tinnemans, M. M., Schutte, B., Lenders, M. H., Ten Velde, G. P., Ramaekers, F. C., and Blijham, G. H. (1993). Cytokinetic analysis of lung cancer by in vivo bromodeoxyuridine labelling, <i>Br J Cancer</i> 67, 1217-22. |

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

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3. van Engeland, M., Kuijpers, H. J., Ramaekers, F. C., Reutelingsperger, C. P., and Schutte, B. (1997). Plasma membrane alterations and cytoskeletal changes in apoptosis. *Exp Cell Res* 235, 421-430.
4. Schutte, B., Nieland, L., van Engeland, M., Henfling, M. E., Meijer, L., and Ramaekers, F. C. (1997). The effect of the cyclin-dependent kinase inhibitor olomoucine on cell cycle kinetics. *Exp Cell Res* 236, 4-15.

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