

Bromodeoxyuridine (BrdU) Monoclonal Antibody
Catalog Number: MMS-139S
Available Size: 0.25 mL

Description: Monoclonal Antibody against Bromodeoxyuridine

Intended Use: **Research Use Only (RUO)**

This product is sold for laboratory research use only, not for human or in-vivo use.

Clone: Bu20a

Form: Cell Culture Supernatant (dialysed against 0.05M Tris, pH 7.2, + 0.015M sodium azide)

Host: Mouse

IsoType: IgG1

Specificity: Bromodeoxyuridine (BrdU) is a thymidine analogue, capable of being incorporated into DNA in place of thymidine during DNA synthesis. By pulse labelling with BrdU, the DNA synthesis in the cells can be analysed by detection with anti-BrdU antibodies. Antibodies against BrdU recognize BrdU in single-stranded DNA (produced by partial denaturation of double-stranded DNA), as well as free BrdU or BrdU coupled to a protein carrier.

Anti-BrdU, Clone Bu20a, shows, in common with other monoclonal antibodies of this specificity, weak cross reactivity with other nucleosides, e.g. thymidine. However, the antibody has been specifically selected with regard to minimal cross-reactivity.

Uses: In pulse labelling with BrdU cells in culture, incubation with BrdU should be performed at a final concentration of 5-10 x 10⁻⁵ mol/L.

Anti-BrdU, Bu20a, may be used in flow cytometry (indirect technique) for detecting BrdU incorporation. Anti-BrdU, Bu20a, has also been used for the detection of viral DNA by in situ hybridization using BrdU-labelled DNA probes. The antibody can also be used in an ELISA technique for measuring BrdU uptake by cells.

Suggested Working Dilution: The optimal working dilution should be determined for each specific assay condition.

- IHC: 1:50-1:200

Storage: Store between 2-8°C.

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* 37:1517-27, 1989.

Vanderlaan M, Thomas CB. Characterization of monoclonal antibodies to bromodeoxyuridine. *Cytometry* 6:501-5, 1985.

Gratzner HG. Monoclonal antibody to 5-bromo- and 5-iododeoxyuridine: a new reagent for detection of DNA replication. *Science* 218:474-5, 1982.

Warranty/Conditions: Covance products may not be resold or modified for resale without prior written approval.

Product Revision Date: 11/28/2007