Bromodeoxyuridine/BrdU Antibody

Monoclonal Mouse IgG_{2A} Clone # BU-1

Catalog Number: MAB7225

DESCRIPTION

Specificity	Detects Bromodeoxyuridine/BrdU.
Source	Monoclonal Mouse IgG_{2A} Clone # BU-1
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	5-iodourindine (5-IO) coupled to ovalbumin
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

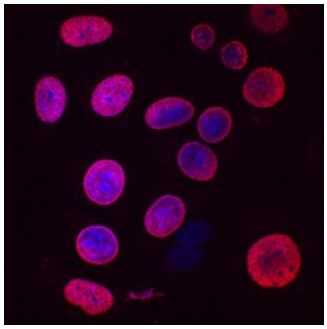
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 µg/10^6 cells	See Below

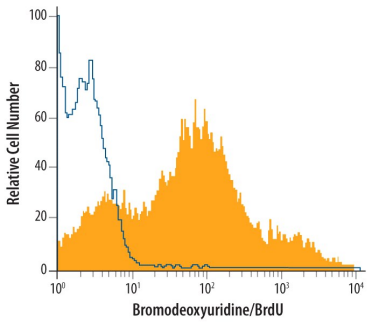
DATA

Immunocytochemistry



Bromodeoxyuridine/BrdU in MCF-7 Human Cell Line. Bromodeoxyuridine/BrdU was detected in immersion fixed MCF-7 human breast cancer cell line stimulated with BrdU using Mouse Anti-Bromodeoxyuridine/BrdU Antigen Affinity-purified Monoclonal Antibody (Catalog # MAB7225) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Intracellular Staining by Flow Cytometry



Detection of Bromodeoxyuridine/BrdU in Human PBMCs by Flow Cytometry Human peripheral blood mononuclear cells (PBMCs) were treated overnight with 50 ng/mL PMA, 500 ng/mL Ionomycin, and 30 µg/mL BrdU, then stained with Mouse Anti-Bromodeoxyuridine/BrdU Monoclonal Antibody (Catalog # MAB7225, filled histogram) or isotype control antibody (Catalog # MAB003, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). To facilitate intracellular staining, cells were fixed with cold, 70% ethanol for 5 minutes, DNA was denatured with 1.5M HCl for 30 minutes, and then cells were permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Bromodeoxyuridine (BrdU) is a nucleoside analog that is incorporated into DNA in place of thymidine. The detection of newly synthesized DNA containing BrdU is a commonly used measure of cell proliferation and progression through S phase of the cell cycle.