



BrdU (bromodeoxyuridine) FITC Conjugate. Mouse Monoclonal Antibody

BACKGROUND

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. Previous methods of detecting DNA included the use of [³H]-thymidine which would be incorporated into the DNA and could then the DNA could be quantified by autoradiography or scintillation counting. These methods are more difficult and require more cleanup due to the radioactive material. An immunohistochemical assay provides a much simpler and cleaner method for detecting DNA in cells. This antibody is also useful for detecting proliferating cells by flow cytometry or immunofluorescence staining. The FITC conjugate is particularly useful in these applications as a secondary antibody is not necessary for visualization. Also, a specific anti-FITC antibody conjugate can be used for signal amplification if desired.

ORDERING INFORMATION

CATALOG NUMBER
X1543M

SIZE
100 µg
FORM
FITC

HOST/CLONE
Mouse Clone MoBU-1

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
See vial for concentration

ISOTYPE
IgG1

APPLICATIONS
Immunohistochemistry, Flow Cytometry

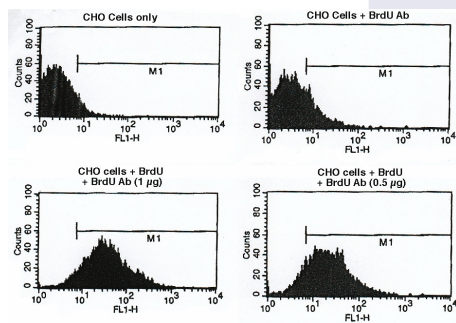
SPECIES REACTIVITY
BrdU Incorporated Cells

ACCESSION NUMBER

IMMUNOGEN

Bromodeoxyuridine conjugated to *Helix Pomatia* Haemocyanin used to immunize BALB/c mice

Flow cytometry data using BrdU antibody conjugated to FITC (Cat. No. X1543M) on untreated CHO cells (top two panels) and CHO cells treated with BrdU (bottom two panels).



POSITIVE CONTROL/TISSUE EXPRESSION

COMMENTS

Reacts with cells containing incorporated BrdU, showing a clear, nucleus confined, speckled pattern. Use at 1-5 $\mu\text{g}/10^6$ cells for flow cytometry. Optimal concentration should be evaluated by serial dilutions.

PURIFICATION

Protein A/G Chromatography

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C . Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Nakamura, S., et al. Application of bromodeoxyuridine (BrdU) and anti-BrdU monoclonal antibody for the in vivo analysis of proliferative characteristics of human leukemia cells in bone marrows. *Oncology* 1991, 48, 285-289
2. Wilson, G., Cell kinetic studies using a monoclonal antibody to bromodeoxyuridine. *Methods Mol. Biol.* 1998, 80, 255-266
3. Gray, J. (Ed), Special Issue: Monoclonal antibodies against bromodeoxyuridine *Cytometry* 1985, Vol. 6(6)

PRODUCT SPECIFIC REFERENCES