# Anti-BrdU [BU20a] mAb

**Catalogue number:** 151340
**Sub-type:** Primary antibody
**Images:**

## Contributor

**Inventor:** Jacqueline Cordell
**Institute:** University of Oxford
**Images:**

## Tool details

***FOR RESEARCH USE ONLY**

**Name:** Anti-BrdU [BU20a] mAb

**Alternate name:**



**Class:** Monoclonal
**Conjugate:** Unconjugated
**Description:** Monoclonal antibody detects proliferating cells in the S phase via binding the synthetic nucleoside BrdU.
**Purpose:**
**Parental cell:**
**Organism:**
**Tissue:**
**Model:**
**Gender:**
**Isotype:** IgG1
**Reactivity:** Human
**Selectivity:**
**Host:** Mouse
**Immunogen:** Bromodeoxyuridine conjugated to BSA
**Immunogen UNIPROT ID:**
**Sequence:**
**Growth properties:**
**Production details:**
**Formulation:**
**Recommended controls:**
**Bacterial resistance:**
**Selectable markers:**

**Additional notes:**

## Target details

**Target:** Bromodeoxyuridine (BrdU)

**Target alternate names:**

**Target background:** Bromodeoxyuridine (5-bromo-2-deoxyuridine, BrdU) is a synthetic nucleoside that is an analogue of thymidine. BrdU is commonly used in the detection of proliferating cells in living tissues. It can be incorporated into the newly synthesized DNA of replicating cells, within the S phase of the cell cycle instead of thymidine. Anti-BrdU works well in immunohistochemistry to identify cells in tissue sections or cytospin preparations that have incorporated BrdU. This indicates cells that were actively replicating their DNA. Anti-BrdU stains BrdU incorporated into the nuclei of a wide range of cell types, including human tonsil lymphoid cells and human tumours growing in nude mice. It is also useful to identify cells in S phase during FACS analysis. Anti-BrdU can be used to analyse the phenotype of S-phase cells and in co-localizing antigen expression and BrdU incorporation in tissue sections. This antibody was created to replace similar use polyclonal antibodies which frequently cross reacted with other nucleotides. Binding of this antibody requires denaturation of the DNA, usually by exposing the cells to acid or heat.

**Molecular weight:**

**Ic50:**



## Applications

**Application:** FACS ; IHC ; IF
**Application notes:**

## Handling

**Format:** Liquid
**Concentration:** 1 mg/ml
**Passage number:**
**Growth medium:**
**Temperature:**
**Atmosphere:**
**Volume:**
**Storage medium:**
**Storage buffer:** PBS with 0.02% azide
**Storage conditions:** Store at -20° C frozen. Avoid repeated freeze / thaw cycles
**Shipping conditions:** Shipping at 4° C

## Related tools

**Related tools:**

## References

**References:** Law et al. 1994. Immunol Today. 15(9):442-9. PMID: 7945784. ; Regulation of lymphocyte activation by the cell-surface molecule CD22. ; Mason et al. 1987. Blood. 69(3):836-40. PMID: 3101766. ; Value of monoclonal anti-CD22 (p135) antibodies for the detection of normal and neoplastic B lymphoid cells. ; Campana et al. 1985. J Immunol. 134(3):1524-30. PMID: 3918103. ; Human B cell development. I. Phenotypic differences of B lymphocytes in the bone marrow and peripheral lymphoid tissue.