

Anti-BrdU [BU20a] rAb

Catalogue number: 154807

Sub-type: Primary antibody

Images:

Contributor

Inventor:

Institute: Absolute Antibody; University of Oxford

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-BrdU [BU20a] rAb

Alternate name:

Class: Recombinant

Conjugate: Unconjugated

Description: Recombinant monoclonal antibody detects proliferating cells in the S phase via binding the synthetic nucleoside BrdU. Background and Research Application 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. This is a recombinant version of the anti-BrdU monoclonal antibody . 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.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG1

Reactivity:

Human

Selectivity:

Host: Mouse

Immunogen: Bromodeoxyuridine conjugated to BSA

Immunogen UNIPROT ID: B0WM48

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: Bromodeoxyuridine (BrdU)

Target alternate names:

Target background: Recombinant monoclonal antibody detects proliferating cells in the S phase via binding the synthetic nucleoside BrdU. Background and Research Application 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. This is a recombinant version of the anti-BrdU monoclonal antibody. 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: IHC

Application notes:

Handling

Format: Liquid

Concentration: 1 mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: 0.1M PBS + 0.5M imidazole at pH 7.4. 0.05% ProClin300™. This product was purified using affinity chromatography (protein A)PtX™ Anti- α -Tubulin Full IgG is 90 % pure in relation to other proteins in the sample.

Storage conditions: Store at -20° C frozen. Avoid repeated freeze / thaw cycles

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: 'Magentosis' in human lactating breast: a mode of cell death accumulating single-stranded DNA stretches or breaks. ; Arnholdt et al. 1991. Virchows Arch B Cell Pathol Incl Mol Pathol. 61(2):75-80. PMID: 1683723. ; Cribriform-morular variant of papillary thyroid carcinoma--cytological and immunocytochemical findings of 18 cases. ; Cribriform-morular variant of papillary thyroid carcinoma: a pathological and molecular genetic study with evidence of frequent somatic mutations in exon 3 of the beta-catenin gene. ; de Lima et al. 2012. Braz J Microbiol. 43(1):393-404. PMID: 24031845. ; Epstein-Barr virus-associated gastric carcinoma in Brazil: comparison between in situ hybridization and polymerase chain reaction detection. ; Expression of CD34, alpha-smooth muscle actin, and transforming growth factor beta1 in squamous intraepithelial lesions and squamous cell carcinoma of the larynx and hypopharynx. ; Hirokawa et al. 2010. Diagn Cytopathol. 38(12):890-6. PMID: 20091902. ; Hirokawa et al. 2010. Diagn Cytopathol. 38(12):890-6. PMID: 20091902. ; Immunohistochemical study of the distribution of endogenous biotin and biotin-binding enzymes in ductal structures of salivary gland tumours. ; Kato et al. 2004. J Pathol. 203(3):814-21. PMID: 15221941. ; Kojc et al. 2005. Hum Pathol. 36(1):16-21. PMID: 15712177. ; Lu et al. 2000. J Oral Pathol Med. 29(9):445-51. PMID: 11016687. ; Nakatani et al. 1998. Am J Surg Pathol. 22(4):399-411. PMID: 9537466. ; Possible linkage between specific histological structures and aberrant reactivation of the Wnt pathway in adamantinomatous craniopharyngioma. ; Pulmonary adenocarcinomas of the fetal lung type: a clinicopathologic study indicating differences in histology, epidemiology, and natural history of low-grade and high-grade forms. ; Receptor-mediated processing of epidermal growth factor in the trophoblast of the human placenta. ; Umemura et al. 1996. Pathol Int. 46(2):122-9. PMID: 10846559. ;

Xu et al. 2003. J Pathol. 199(1):58-67. PMID: 12474227.

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