# abcam

## Product datasheet

# Alexa Fluor® 488 Anti-BrdU antibody [BU1/75 (ICR1)] ab220074

2 References 1 图像

概述

产品名称 Alexa Fluor® 488荧光Anti-BrdU抗体[BU1/75 (ICR1)]

描述 Alexa Fluor® 488荧光大鼠单克隆抗体[BU1/75 (ICR1)] to BrdU

**宿主** Rat

偶联物 Alexa Fluor® 488. Ex: 495nm, Em: 519nm

特异性 This antibody reacts with BrdU in single stranded DNA, BrdU attached to a protein carrier or free

BrdU. It detects nucleated cells in S-Phase which have had BrdU incorporated into their DNA. Also reacts with chlorodeoxyuridine but with reduced staining. The antibody does not react with thymidine. It has been reported in the literature that this antibody clone cross-reacts with Edu

(PMID: 23272138) and some customers reported that it cross reacts with IdU.

经测试应用 适用于: ICC/IF

种属反应性 与反应: Species independent

免疫原 The details of the immunogen for this antibody are not available.

阳性对照 ICC/IF: HeLa cells treated with BrdU (10uM for 24 hours)

常规说明 The antibody recognises single stranded DNA so the DNA needs to be unraveled first. This can

be done with DNAse, although this doesn't give the best results. Depending on the assay, acid denaturation with 2M HCL or heat denaturation are the most successful. Please note this step is critical in any assay with this antibody and is the area that should be modified to optimise results.

Detailed BrdU protocol is available in "Neuroscience protocols" on our "Protocol and

troubleshooting tips" webpage.

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outlicensing@thermofisher.com.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

#### 性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

纯**度** Immunogen affinity purified

**克隆** 单克隆

**克隆编号** BU1/75 (ICR1)

同种型 lgG2a

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab220074于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

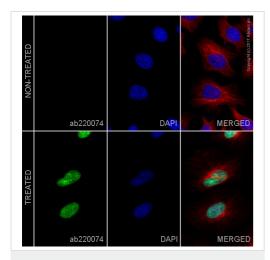
应用	Ab评论	说明
ICC/IF		1/100. This product gave a positive signal in HeLa cells treated with BrdU (10uM for 24 hours) fixed with 4% formaldehyde (10 min) and 100% methanol (5 min)

## 靶标

#### 相关性

The immunocytochemical detection of bromodeoxyuridine (BrdU) incorporated into DNA is a powerful tool to study the cytokinetics of normal and neoplastic cells. In vitro or in vivo labeling of tumor cells with the thymidine analogue BrdU and the subsequent detection of incorporated BrdU with specific anti-BrdU monoclonal antibodies is an accurate and comprehensive method to quantitate the degree of DNA-synthesis. BrdU is incorporated into the newly synthezised DNA of S-phase cells may provide an estimate for the fraction of cells in S-phase. Also dynamic proliferative information such as the S-phase transit rate and the potential doubling time can be obtained, by means of bivariate BrdU/DNA flow cytometric analysis.

细胞定位 Nuclear



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-BrdU antibody [BU1/75 (ICR1)] (ab220074)

ab220074 staining BrdU in HeLa cells. Untreated and BrdU treated (10uM for 24 hours) cells were fixed with 100% methanol (5 min) and then subjected to acid hydrolysis using 2M HCL in 0.1% PBS-Tween for 30 minutes at room temperature to denature the DNA. They were then permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab220074 at 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in HeLa cells fixed with 4% formaldehyde (10 min).

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