# abcam

## Product datasheet

## Alexa Fluor® 488 Anti-PCNA antibody [PC10] ab201672

6 References 2 图像

### 概述

常规说明

产品名称 Alexa Fluor® 488荧光Anti-PCNA抗体[PC10]

描述 Alexa Fluor® 488荧光小鼠单克隆抗体[PC10] to PCNA

**宿主** Mouse

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

经测试应用 适用于: ICC/IF, Flow Cyt (Intra)

种属反应性 与反应: Human

预测可用于: Mouse, Rat, Chicken, Cow, Pigeon, Pig, Drosophila melanogaster, Monkey,

Zebrafish, Thornback ray, Dogfish, Catshark

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阳性对照 ICC/IF: HeLa cells. Flow Cyt (Intra): HeLa cells.

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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

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

Contains 0.4M arginine

纯**度** Affinity purified

 克隆
 单克隆

 克隆编号
 PC10

**骨髓瘤** Sp2/0-Ag14

同种型 lgG2a 轻链类型 kappa

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab201672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		1/200.
Flow Cyt (Intra)		1/500.

## 靶标

功能 This protein is an auxiliary protein of DNA polymerase delta and is involved in the control of

eukaryotic DNA replication by increasing the polymerase's processibility during elongation of the

leading strand. Induces a robust stimulatory effect on the 3'-5' exonuclease and 3'-

phosphodiesterase, but not apurinic-apyrimidinic (AP) endonuclease, APEX2 activities. Has to

be loaded onto DNA in order to be able to stimulate APEX2.

序列相似性 Belongs to the PCNA family.

翻译后修饰 Upon methyl methanesulfonate-induced DNA damage, mono-ubiquitinated by the UBE2B-RAD18

complex on Lys-164. This induces non-canonical polyubiquitination on Lys-164 through 'Lys-63' linkage of ubiquitin moieties by the E2 complex UBE2N-UBE2V2 and the E3 ligases, HLTF, RNF8 and SHPRH, which is required for DNA repair. 'Lys-63' polyubiquitination prevents genomic instability on DNA damage. Monoubiquitination at Lys-164 also takes place in undamaged proliferating cells, and is mediated by the DCX(DTL) complex, leading to enhance

PCNA-dependent translesion DNA synthesis.

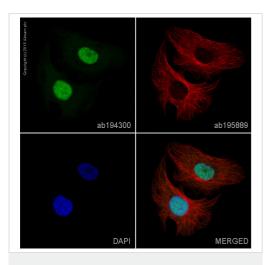
Acetylated in response to UV irradiation. Acetylation disrupts interaction with NUDT15 and

promotes degradation.

细胞定位 Nucleus. Forms nuclear foci representing sites of ongoing DNA replication and vary in

morphology and number during S phase. Together with APEX2, is redistributed in discrete

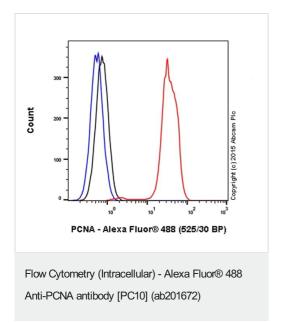
#### 图片



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-PCNA antibody [PC10] (ab201672)

ab201672 staining PCNA in HeLa cells. The cells were fixed with 100% methanol (5min), 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 ab201672 at 1/200 dilution (shown in green) and <a href="mailto:ab195889">ab195889</a>, Mouse monoclonal to alpha Tubulin (Alexa Fluor<sup>®</sup> 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).



Overlay histogram showing HeLa cells stained with ab201672 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab201672, 1/500 dilution) for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a (monoclonal) Alexa Fluor® 488 (ab171464) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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