abcam

Product datasheet

Alexa Fluor® 488 Anti-Vimentin antibody [EPR3776] -Cytoskeleton Marker ab185030





重组 RabMAb

**** 2 Abreviews 4 References

概述

产品名称 Alexa Fluor® 488荧光Anti-Vimentin抗体[EPR3776] - Cytoskeleton Marker

描述 Alexa Fluor® 488荧光兔单克隆抗体[EPR3776] to Vimentin - Cytoskeleton Marker

宿主 Rabbit

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

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 ICC/IF: HeLa and wildtype HAP1 cells. Flow Cyt (intra): wildtype HAP1 cells.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit 常规说明 monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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outlicensing@thermofisher.com.

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 or -

80°C. Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

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

纯**度** Protein A purified

克隆 单克隆 **克隆编号** EPR3776

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab185030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		1/50 - 1/100.
Flow Cyt (Intra)		Use a concentration of 0.1 µg/ml.

如	卡
牝	彻

功能 Vimentins are class-Ill intermediate filaments found in various non-epithelial cells, especially

mesenchymal cells. Vimentin is attached to the nucleus, endoplasmic reticulum, and

mitochondria, either laterally or terminally.

Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2.

组织特异性 Highly expressed in fibroblasts, some expression in T- and B-lymphocytes, and little or no

expression in Burkitt's lymphoma cell lines. Expressed in many hormone-independent mammary

carcinoma cell lines.

疾病相关 Cataract 30

序列相似性 Belongs to the intermediate filament family.

结**构域** The central alpha-helical coiled-coil rod region mediates elementary homodimerization.

The [IL]-x-C-x-x-[DE] motif is a proposed target motif for cysteine S-nitrosylation mediated by the

iNOS-S100A8/A9 transnitrosylase complex.

翻译后修饰 Filament disassembly during mitosis is promoted by phosphorylation at Ser-55 as well as by

nestin (By similarity). One of the most prominent phosphoproteins in various cells of mesenchymal origin. Phosphorylation is enhanced during cell division, at which time vimentin filaments are

 $significantly\ reorganized.\ Phosphorylation\ by\ PKN1\ inhibits\ the\ formation\ of\ filaments.$

Phosphorylated at Ser-56 by CDK5 during neutrophil secretion in the cytoplasm. Phosphorylated

by STK33.

O-glycosylated during cytokinesis at sites identical or close to phosphorylation sites, this

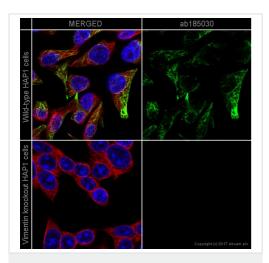
interferes with the phosphorylation status.

S-nitrosylation is induced by interferon-gamma and oxidatively-modified low-densitity lipoprotein

(LDL(ox)) possibly implicating the iNOS-S100A8/9 transnitrosylase complex.

Vimentin is found in connective tissue and in the cytoskeleton.

图片



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Vimentin antibody [EPR3776] -Cytoskeleton Marker (ab185030)

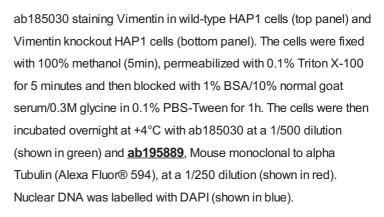
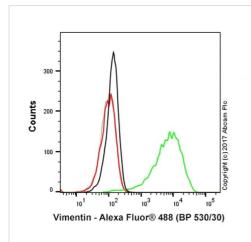


Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



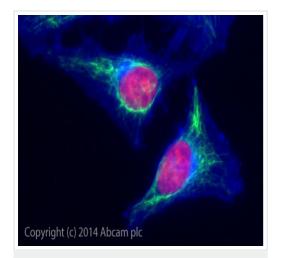
Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab185030)

Overlay histogram showing HAP1 wildtype (green line) and HAP1-VIM knockout cells (red line) stained with ab185030. The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab185030, 0.1µg/ml dilution) for 30 min at 22°C.

A rabbit monoclonal IgG isotype control antibody (<u>ab199091</u>) was used at the same concentration and conditions as the primary antibody (HAP1 wildtype - black line, HAP1-VIM knockout - grey line). Unlabelled sample was also used as a control (this line is not shown for the purpose of simplicity).

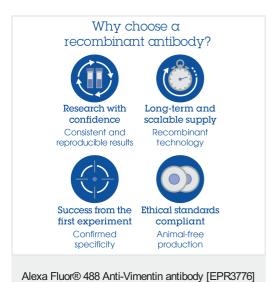
Acquisition of >5,000 events were collected using a 50 mW Yellow/Green laser (488nm) and 630/30 bandpass filter.

This antibody can also be used in HAP1 cells fixed with 4% formaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 15 min under the same conditions.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab185030)

ab185030 staining Vimentin in HeLa cells. The cells were fixed with 100% methanol (5min) and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab185030 (Alexa Fluor[®] 488) at a working dilution of 1 in 100 overnight at +4°C (shown in green). Alexa Fluor[®] 350 WGA was used at a 1/200 dilution and incubated for 1h with the cells, to label plasma membranes (shown in blue). Nuclear DNA was labelled in red with 1.25 µM DRAQ5™ (ab108410).



- Cytoskeleton Marker (ab185030)

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