abcam

Product datasheet

Alexa Fluor® 568 Anti-Vimentin antibody [EPR3776] -Cytoskeleton Marker ab202504





重组 RabMAb

**** 1 Abreviews 2 References

概述

产品名称 Alexa Fluor® 568荧光Anti-Vimentin抗体[EPR3776] - Cytoskeleton Marker

描述 Alexa Fluor® 568荧光兔单克隆抗体[EPR3776] to Vimentin - Cytoskeleton Marker

宿主 Rabbit

偶联物 Alexa Fluor® 568. Ex: 578nm, Em: 603nm

经测试应用 适用于: ICC/IF, Flow Cyt (Intra)

种属反应性 与反应: Mouse. Human

预测可用于: Rat 🕰

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

阳性对照 ICC/IF: NIH3T3, 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**.

> Alexa Fluor[®] is a registered trademark of Molecular Probes, Inc., a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact

Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or

outlicensing@thermofisher.com.

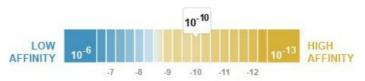
性能

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.

Avoid freeze / thaw cycle. Store In the Dark.

 $K_D = 1.10 \times 10^{-10} M$ 解离常数(KD)



Learn more about K_D

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

单**克隆** 克隆 克隆编号 EPR3776 同种型 lgG

应用

靶标

组织特异性

The Abpromise guarantee Abpromise™承诺保证使用ab202504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		1/1000. This product gave a positive signal in NIH3T3 cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min) and HeLa cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min)
Flow Cyt (Intra)		Use a concentration of 0.1 µg/ml.

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.

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.

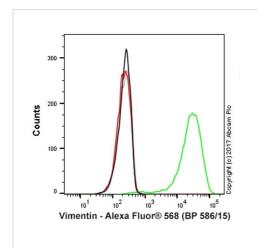
Cytoplasm.

形式

细胞定位

Vimentin is found in connective tissue and in the cytoskeleton.

图片



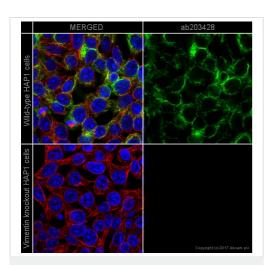
Flow Cytometry (Intracellular) - Alexa Fluor® 568 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab202504)

Overlay histogram showing HAP1 wildtype (green line) and HAP1-VIM knockout cells (red line) stained with ab202504. 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 (ab202504, 0.1µg/ml dilution) for 30 min at 22°C.

A rabbit monoclonal IgG isotype control antibody (ab209613) 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 (561nm) and 586/15 bandpass filter.

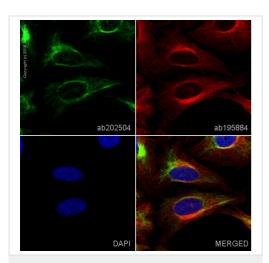
This antibody can also be used in HAP1 cells fixed with 4% formaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 15 min under the same conditions.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 568 Anti-Vimentin antibody [EPR3776] -Cytoskeleton Marker (ab202504)

ab202504 staining Vimentin in wild-type HAP1 cells (top panel) and Vimentin knockout HAP1 cells (bottom panel). 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 ab202504 at a 1/1000 dilution (shown in green) and ab195884, Rat monoclonal [YOL1/34] to Tubulin (Alexa Fluor® 647), at a 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).

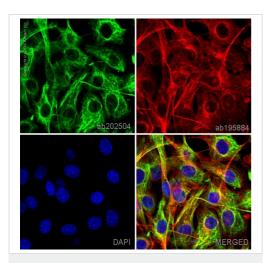


Immunocytochemistry/ Immunofluorescence - Alexa
Fluor® 568 Anti-Vimentin antibody [EPR3776] Cytoskeleton Marker (ab202504)

ab202504 staining Vimentin in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), 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 ab202504 at 1/1000 dilution (pseudocolored in green) and ab195884, Rat monoclonal to Tubulin (Alexa Fluor[®] 647), 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 100% methanol (5 min).

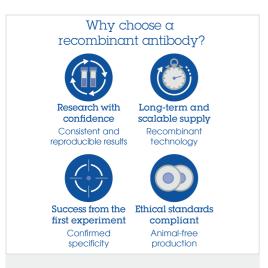


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 568 Anti-Vimentin antibody [EPR3776] -Cytoskeleton Marker (ab202504)

ab202504 staining Vimentin in NIH3T3 cells. The cells were fixed with 4% formaldehyde (10 min), 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 ab202504 at a 1/1000 dilution (shown in pseudocolor green) and ab195884, Rat monoclonal to alpha Tubulin (Alexa Fluor[®] 647), at a 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 NIH3T3 cells fixed with 100% methanol (5 min).



Alexa Fluor® 568 Anti-Vimentin antibody [EPR3776]

- Cytoskeleton Marker (ab202504)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish

- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.cn/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors