


Alexa Fluor® 488 Anti-Vimentin antibody [V9] - Cytoskeleton Marker ab195877

敲除验证

8 References 3 图像

概述

产品名称	Alexa Fluor® 488荧光Anti-Vimentin抗体[V9] - Cytoskeleton Marker
描述	Alexa Fluor® 488荧光小鼠单克隆抗体[V9] to Vimentin - Cytoskeleton Marker
宿主	Mouse
偶联物	Alexa Fluor® 488. Ex: 495nm, Em: 519nm
经测试应用	适用于: Flow Cyt (Intra), ICC/IF
种属反应性	与反应: Human 预测可用于: Rat, Horse, Chicken, Cow, Cat, Dog, Pig 
免疫原	Full length native protein (purified). This information is proprietary to Abcam and/or its suppliers.
阳性对照	ICC/IF: HeLa cells. Flow Cyt (Intra): HeLa cells
常规说明	<p>This monoclonal antibody to vimentin has been knockout validated in ICC/IF. The expected staining for vimentin was observed in wild type cells and no staining was seen in vimentin knockout cells.</p> <p>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: (i) 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.</p> <p>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</p>

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. 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	Immunogen affinity purified
克隆	单克隆
克隆编号	V9
同种型	IgG1

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab195877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
Flow Cyt (Intra)		1/500.
ICC/IF		1/1000.

靶标

功能	Vimentins are class-III 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-density lipoprotein (LDL(ox)) possibly implicating the iNOS-S100A8/9 transnitrosylase complex.

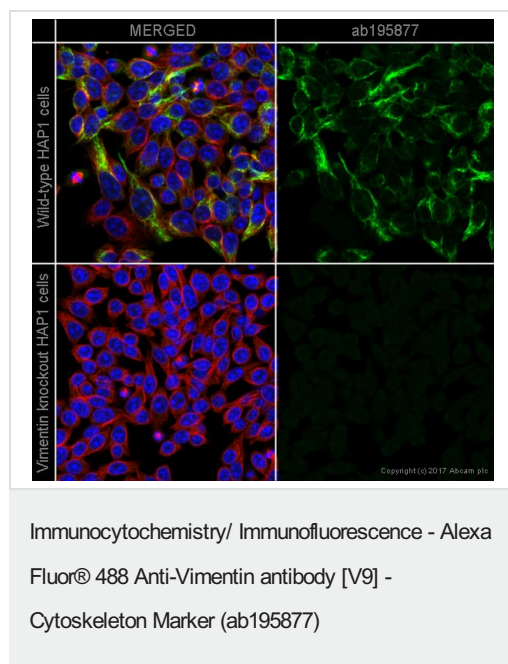
细胞定位

Cytoplasm.

形式

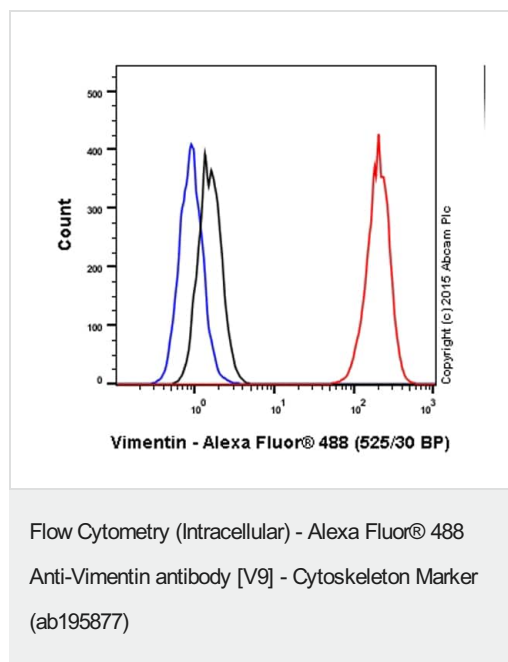
Vimentin is found in connective tissue and in the cytoskeleton.

图片



ab195877 staining Vimentin (shown in green) 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 with ab195877 at 1/1000 dilution (shown in green) and **ab195889** at 1/250 dilution (shown in pseudo colour red) overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

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

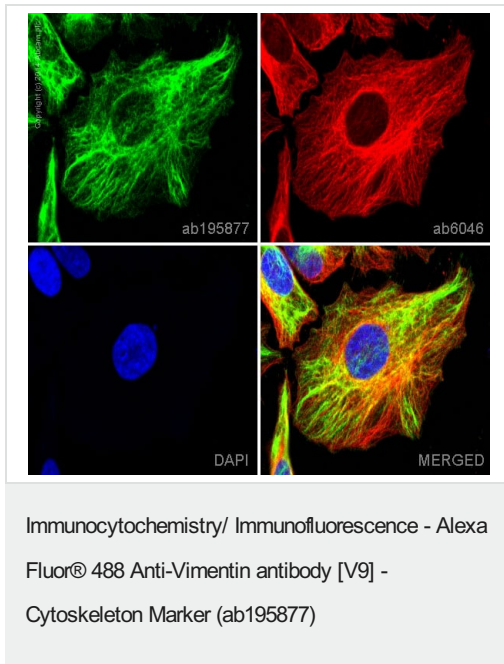


Overlay histogram showing HeLa cells stained with ab195877 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab195877, 1/500 dilution) for 30 min at 22°C.

Isotype control antibody (black line) was mouse IgG1 (monoclonal) Alexa Fluor® 488 (**ab171463**) 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. This antibody gave a positive signal in HeLa cells fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under

the same conditions.



ab195877 staining Vimentin in HeLa cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized in 0.1% Triton X-100 for 5 minutes 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 ab195877 at 1/1000 dilution (shown in green) and **ab6046**, Rabbit polyclonal to beta Tubulin at 1µg/ml overnight at +4°C. Ab150088, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) preadsorbed, was then incubated at 2µg/ml for 1h at room temperature (shown in red) Nuclear DNA was labelled in blue with DAPI.

This product gave a positive signal in 100% methanol (5 min) fixed HeLa cells under the same testing conditions.

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

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