

## **Product datasheet**

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

KO 評価済 リコンピナント RabMAb

★★★★★ <u>1 Abreviews</u> <u>2 References</u> 画像数 5

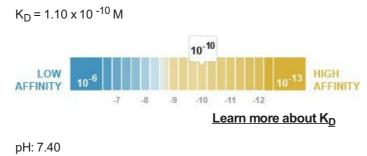
製品の概要	
製品名	Alexa Fluor® 568 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker
製品の詳細	Alexa Fluor® 568 Rabbit monoclonal [EPR3776] to Vimentin - Cytoskeleton Marker
由来種	Rabbit
標識	Alexa Fluor® 568. Ex: 578nm, Em: 603nm
アプリケーション	適用あり: ICC/IF, Flow Cyt (Intra)
種交差性	交差種: Mouse, Human
	交差が予測される動物種: Rat 🛛 📤
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	ICC/IF: NIH3T3, HeLa and wildtype HAP1 cells. Flow Cyt (intra): wildtype HAP1 cells.
特記事項	Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b><u>RabMAb<sup>®</sup> patents</u></b> .
	Alexa Fluor <sup>®</sup> is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor <sup>®</sup> dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor <sup>®</sup> 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 <sup>®</sup> 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 <b>outlicensing@thermofisher.com</b> .

#### 製品の特性

保存	方	法
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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.

解離定数(K<sub>D</sub>値)



バッファー	pH: 7.40
	Preservative: 0.02% Sodium azide
	Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR3776
アイソタイプ	lgG

アプリケーション

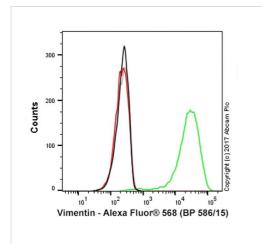
The Abpromise guaranteeAbpromise保証は、次のテスト済みアプリケーションにおけるab202504の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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.

ターゲット情報	
機能	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.
組織特異性	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.
関連疾患	Cataract 30
配列類似性	Belongs to the intermediate filament family.
ドメイン	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.

翻訳後修飾 細胞内局在	<ul> <li>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.</li> <li>Phosphorylated at Ser-56 by CDK5 during neutrophil secretion in the cytoplasm. Phosphorylated by STK33.</li> <li>O-glycosylated during cytokinesis at sites identical or close to phosphorylation sites, this interferes with the phosphorylation status.</li> <li>S-nitrosylation is induced by interferon-gamma and oxidatively-modified low-densitity lipoprotein (LDL(ox)) possibly implicating the iNOS-S100A8/9 transnitrosylase complex.</li> <li>Cytoplasm.</li> </ul>
製品の状態	Vimentin is found in connective tissue and in the cytoskeleton.

画像

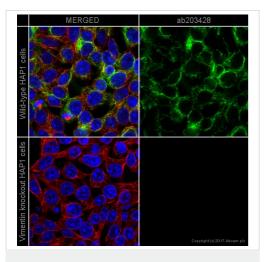


Flow Cytometry (Intracellular) - Alexa Fluor® 568 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab202504) Overlay histogram showing HAP1 wildtype (green line) and HAP1-VIM knockout cells (red line) stained with ab202504. The cells were fixed with 80% methanol (5 min) and then permeabilized 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, 0.1 $\mu$ g/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).

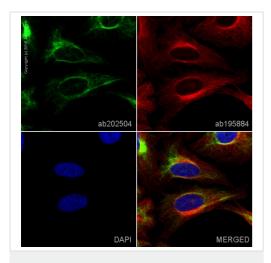
Acquisition of >5,000 events were collected using a 50 mW Yellow/Green laser (561nm) and 586/15 bandpass filter.

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).

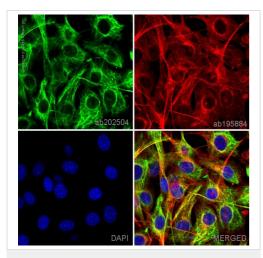
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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 <u>ab195884</u>, Rat monoclonal to Tubulin (Alexa Fluor<sup>®</sup> 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<sup>®</sup> 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).



- Cytoskeleton Marker (ab202504)

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