abcam

Product datasheet

Alexa Fluor® 594 Anti-Vimentin antibody [EPR3776] -Cytoskeleton Marker ab154207





14 References



製品の概要

製品名 Alexa Fluor® 594 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker

製品の詳細 Alexa Fluor® 594 Rabbit monoclonal [EPR3776] to Vimentin - Cytoskeleton Marker

由来種 Rabbit

標識 Alexa Fluor® 594, Ex: 590nm, Em: 617nm

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 corresponding to Human Vimentin (C terminal).

Database link: P08670

ICC/IF: HeLa, NIH3T3 and wildtype HAP1 cells. Flow Cyt (intra): wildtype HAP1 cells. ポジティブ・コントロール

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

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特記事項

製品の特性

製品の状態 Liquid

保存方法 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.

パッファー Preservative: 0.01% Sodium azide

Constituents: 50% Glycerol (glycerin, glycerine), 0.05% 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 guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab154207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		1/100 - 1/1000.
Flow Cyt (Intra)		Use a concentration of 0.1 µg/ml.

ターゲット情報

機能 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.

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 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.

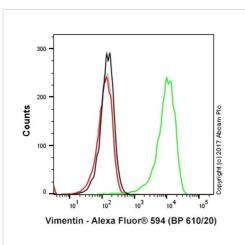
細胞内局在

Cytoplasm.

製品の状態

Vimentin is found in connective tissue and in the cytoskeleton.

画像

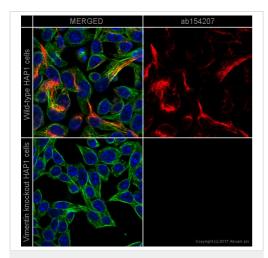


Flow Cytometry (Intracellular) - Alexa Fluor® 594 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab154207) Overlay histogram showing HAP1 wildtype (green line) and HAP1-VIM knockout cells (red line) stained with ab154207. The cells were fixed with 4% formaldehyde (10 min) and then permeabilized 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 (ab154207, 0.1 μ g/ml dilution) for 30 min at 22°C.

A rabbit monoclonal IgG isotype control antibody (<u>ab208568</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.

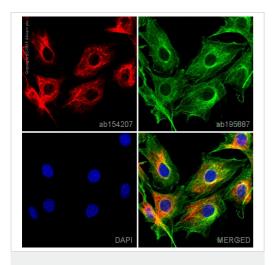
This antibody can also be used in HAP1 cells fixed with 80% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 15 min under the same conditions.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 594 Anti-Vimentin antibody [EPR3776] -Cytoskeleton Marker (ab154207)

ab154207 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 with ab154207 at 1/1000 dilution (shown in red) and ab195887 at 1/250 dilution (shown in green) overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.

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

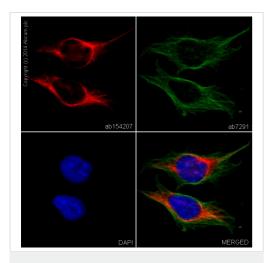


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 594 Anti-Vimentin antibody [EPR3776] -Cytoskeleton Marker (ab154207)

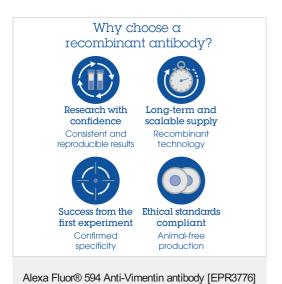
ab154207 staining Vimentin in NIH3T3 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab154207 at a 1/1000 dilution (shown in red) and <u>ab195887</u>, Mouse monoclonal to alpha Tubulin (Alexa Fluor[®] 488), at a 1/250 dilution (shown in green). 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).



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 594 Anti-Vimentin antibody [EPR3776] -Cytoskeleton Marker (ab154207) ab154207 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 ab154207 at a working dilution of 1 in 100 (shown in pseudo color red) and <u>ab7291</u> (Mouse monoclonal [DM1A] to alpha Tubulin) at 1 μ g/ml overnight at +4°C, followed by a further incubation at room temperature for 1h with an AlexaFluor® 488 Goat anti-Mouse secondary (<u>ab150117</u>) at 2 μ g/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.



- Cytoskeleton Marker (ab154207)

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