abcam

Product datasheet

HRP Anti-Vimentin antibody [V9] - Cytoskeleton Marker ab196602



画像数3

製品の概要

製品名 HRP Anti-Vimentin antibody [V9] - Cytoskeleton Marker

製品の詳細 HRP Mouse monoclonal [V9] to Vimentin - Cytoskeleton Marker

由来種 Mouse 標識 HRP

アプリケーション 適用あり: IHC-P, WB

種交差性 交差種: Human

交差が予測される動物種: Rat, Cow 📤

免疫原 Full length native protein (purified). This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: HeLa and MOLT4 whole cell lysates. IHC-P: normal human colon tissue.

节記事項

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

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

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.

バッファー pH: 7.40

Preservative: 0.1% Proclin 300 Solution

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

精製度 Affinity purified ポリ/モノ モノクローナル

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クローン名 V9 **アイソタイプ I**gG1

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ab196602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
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/5000. Detects a band of approximately 57 kDa (predicted molecular weight: 54 kDa).

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.

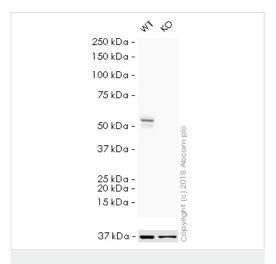
S-nitrosylation is induced by interferon-gamma and oxidatively-modified low-densitity lipoprotein

(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



Western blot - HRP Anti-Vimentin antibody [V9] - Cytoskeleton Marker (ab196602)

All lanes : HRP Anti-Vimentin antibody [V9] - Cytoskeleton Marker (ab196602) at 1/5000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

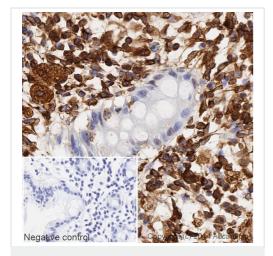
Lane 2: VIM (Vimentin) knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 54 kDa

Exposure time: 1 minute

ab196602 was shown to specifically react with Vimentin in wild-type HAP1 cells as signal was lost in VIM (Vimentin) knockout cells. Wild-type and VIM (Vimentin) knockout samples were subjected to SDS-PAGE. Ab196602 and ab184095 (Mouse monoclonal [mAbcam 9484] to GAPDH - Loading Control (Alexa Fluor® 680) loading control) were incubated overnight at 4°C at 1/5000 dilution and 1/1000 dilution respectively. The loading control was imaged using the Licor Odyssey CLx prior to blots being developed with ECL technique.



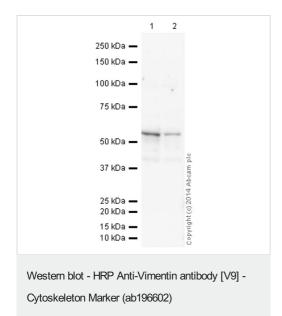
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - HRP Anti-Vimentin antibody

[V9] - Cytoskeleton Marker (ab196602)

IHC image of Vimentin staining in a section of formalin-fixed paraffin-embedded normal human colon tissue*, performed on a Leica BOND. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab196602 at 1/100 dilution, for 15 mins at room temperature. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset negative control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



All lanes : HRP Anti-Vimentin antibody [V9] - Cytoskeleton Marker (ab196602) at 1/5000 dilution

Lane 1: HeLa whole cell lysate (ab150035)

Lane 2 : MOLT4 (Human acute lymphoblastic leukemia cell line)

Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 54 kDa **Observed band size:** 57 kDa

Exposure time: 8 seconds

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab196602 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.

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