abcam

Product datasheet

Anti-Vimentin (phospho S73) antibody [EP1070Y] ab52944

RabMAb

4 References 画像数 6

製品の概要

製品名 Anti-Vimentin (phospho S73) antibody [EP1070Y]

製品の詳細 Rabbit monoclonal [EP1070Y] to Vimentin (phospho S73)

由来種 Rabbit

アプリケーション 適用あり: WB, IP, Dot blot

適用なし: ICC/IF or IHC-P

種交差性 交差種: Mouse, Rat, Human

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 WB: HeLa; NIH/3T3; C6 lysates. IP: HeLa cells (untreated and Calyculin A treated).

特記事項 Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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 long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EP1070Y

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アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab52944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
WB		1/10000. Detects a band of approximately 54 kDa (predicted molecular weight: 54 kDa).
IP		1/20. For unpurified use at 1:40.
Dot blot		Use at an assay dependent concentration.

追加情報

Is unsuitable for ICC/IF or IHC-P.

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.

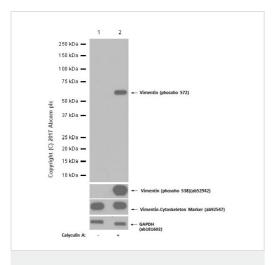
S-nitrosylation is induced by interferon-gamma and oxidatively-modified low-densitity lipoprotein

(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 - Anti-Vimentin (phospho S73) antibody [EP1070Y] (ab52944)

All lanes : Anti-Vimentin (phospho S73) antibody [EP1070Y] (ab52944) at 1/10000 dilution (purified)

Lane 1 : C6 (Rat glial tumor cell line) whole cell lysate, untreated Lane 2 : C6 (Rat glial tumor glial cell) starved for 24 hours, then treated with 100ng Calyculin A for 60 minutes, whole cell lysate

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 54 kDa

150 kDa —
150 kDa —
150 kDa —
100 kDa —
75 kDa —
50 kDa —
50 kDa —
25 kDa —
26 kDa —
26 kDa —
27 kDa —
28 kDa —
28 kDa —
29 kDa —
29 kDa —
20 kDa —
20 kDa —
20 kDa —
21 kDa —
22 kDa —
23 kDa —
24 kDa —
25 kDa —
26 kDa —
26 kDa —
27 kDa —
28 kDa —
29 kDa —
20 kDa

Immunoprecipitation - Anti-Vimentin (phospho S73) antibody [EP1070Y] (ab52944)

Blocking and diluting buffer: 5% NFDM/TBST

ab52944 (purified) at 1:20 dilution (2µg) immunoprecipitating Vimentin in HeLa starved 24 hours, then treated with 100nM Calyculin A for 30 minutes whole cell lysate.

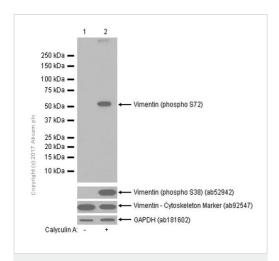
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) starved 24 hours,then treated with 100nM Calyculin A for 30 minutes whole cell lysate 10ug

Lane 2 (+): ab52944 & HeLa starved 24 hours, then treated with 100nM Calyculin A for 30 minutes whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab52944 in HeLa starved 24 hours,then treated with 100nM Calyculin A for 30 minutes whole cell lysate

For western blotting, VeriBlot for IP Detection Reageant (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-Vimentin (phospho S73) antibody [EP1070Y] (ab52944)

All lanes : Anti-Vimentin (phospho S73) antibody [EP1070Y] (ab52944) at 1/10000 dilution (purified)

Lane 1: Untreated with HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HeLa (Human cervix adenocarcinoma epithelial cell) starved for 24 hours,then treated with 100nM Calyculin A for 30 minutes whole cell lysates

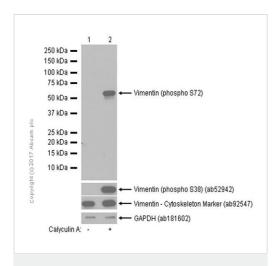
Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 54 kDa

Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-Vimentin (phospho S73) antibody [EP1070Y] (ab52944)

All lanes : Anti-Vimentin (phospho S73) antibody [EP1070Y] (ab52944) at 1/10000 dilution (purified)

Lane 1 : Untreated with NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

Lane 2: NIH/3T3 (Mouse embryonic fibroblast) treated with 100ng/ml Calyculin A for 30 minutes whole cell lysates

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 54 kDa

Dot Blot - Anti-Vimentin (phospho S73) antibody [EP1070Y] (ab52944)

Blocking and diluting buffer: 5% NFDM/TBST

Primary antibody dilution: 1/1000

Secondary antibody: goat anti-rabbit lgG, (H+L), peroxidase

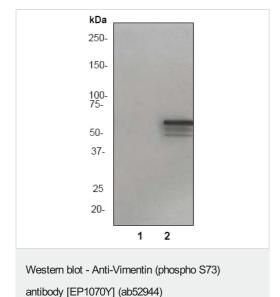
conjugated (1/2500 dilution)

Blocking & dilutiing buffer: 5% NFDM/TBST

Lane 1 sample: Vimentin (pS72) phospho peptide

Lane 2 sample: Vimentin non-phospho peptide

Exposure time: 3 minutes



All lanes : Anti-Vimentin (phospho S73) antibody [EP1070Y] (ab52944) at 1/1000000 dilution

Lane 1: HeLa cell lysate untreated

Lane 2: HeLa cell lysate treated with Calyculin A

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: goat anti-rabbit HRP at 1/2000 dilution

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

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

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