abcam

Product datasheet

Anti-Vimentin (phospho S82) antibody [EP1071Y] - BSA and Azide free ab284697

RabMAb

2 Images

Overview

Product name Anti-Vimentin (phospho S82) antibody [EP1071Y] - BSA and Azide free

DescriptionRabbit monoclonal [EP1071Y] to Vimentin (phospho S83) - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, Dot blot

Unsuitable for: Flow Cyt,IHC-P or IP

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HeLa cell lysate (AP untreated) + Calyculin A.

General notes ab284697 is the carrier-free version of <u>ab52943</u>

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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

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Properties

Form Liquid

Shipped at 4°C. Store at +4°C. Storage instructions

Storage buffer pH: 7.2

Constituent: 100% PBS

Carrier free Yes

Purity Tissue culture supernatant

Clonality Monoclonal Clone number EP1071Y

Isotype ΙgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab284697 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 53 kDa.
Dot blot		Use at an assay dependent concentration.

Application notes Is unsuitable for Flow Cyt,IHC-P or IP.

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Function 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.

Tissue specificity 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.

Involvement in disease Cataract 30

Sequence similarities Belongs to the intermediate filament family.

Domain 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.

Post-translational

Filament disassembly during mitosis is promoted by phosphorylation at Ser-55 as well as by modifications 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.

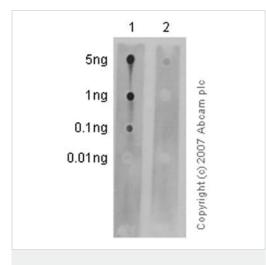
Cellular localization

Cytoplasm.

Form

Vimentin is found in connective tissue and in the cytoskeleton.

Images



Dot Blot - Anti-Vimentin (phospho S83) antibody [EP1071Y] - BSA and Azide free (ab284697)

This data was developed using <u>ab52943</u>, the same antibody clone in a different buffer formulation.

Primary antibody dilution: 1/1000

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

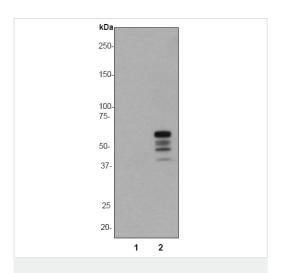
Secondary antibody dilution: 1/2500

Blocking and dilution buffer: 5% NFDM/TBST

Lane 1 sample: Vimentin (pS83) phospho peptide

Lane 2 sample: Vimentin non-phospho peptide

Exposure time: 3 minutes



Western blot - Anti-Vimentin (phospho S83) antibody [EP1071Y] - BSA and Azide free (ab284697)

All lanes : Anti-Vimentin (phospho S82) antibody [EP1071Y] (ab52943) at 1/500000 dilution

Lane 1: HeLa cell lysate AP treated

Lane 2: HeLa cell lysate (AP untreated) + Calyculin A

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 53 kDa Observed band size: 54 kDa

This data was developed using ab52943, the same antibody clone

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