

## Product datasheet

### Anti-Vimentin antibody ab24525

★★★★★ [11 Abreviews](#) [99 References](#) [4 Images](#)

#### Overview

<b>Product name</b>	Anti-Vimentin antibody
<b>Description</b>	Chicken polyclonal to Vimentin
<b>Host species</b>	Chicken
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant full length protein corresponding to Human Vimentin. Database link: <a href="#">P08670</a>
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.03% Sodium azide Constituent: 99% PBS
<b>Purity</b>	IgY fraction
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgY

#### Applications

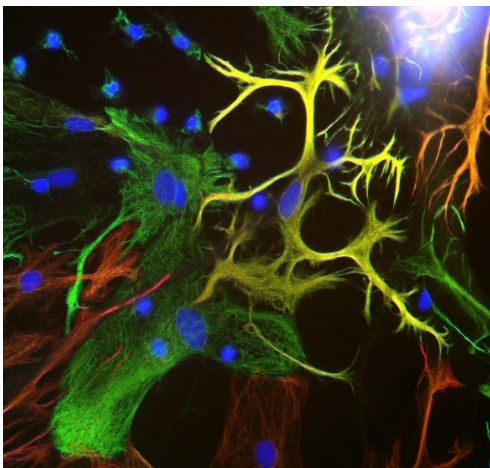
**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab24525 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★ (1)	Use at an assay dependent concentration.
WB	★★★★★ (1)	1/10000.

## Target

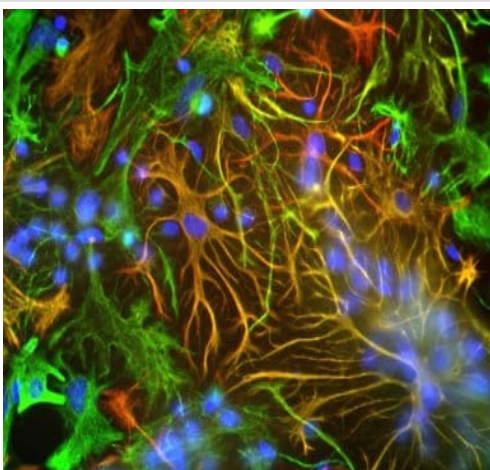
<b>Function</b>	<p>Vimentins are class-III intermediate filaments found in various non-epithelial cells, especially mesenchymal cells. Vimentin is attached to the nucleus, endoplasmic reticulum, and mitochondria, either laterally or terminally.</p> <p>Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2.</p>
<b>Tissue specificity</b>	<p>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.</p>
<b>Involvement in disease</b>	<p>Cataract 30</p>
<b>Sequence similarities</b>	<p>Belongs to the intermediate filament family.</p>
<b>Domain</b>	<p>The central alpha-helical coiled-coil rod region mediates elementary homodimerization.</p> <p>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.</p>
<b>Post-translational modifications</b>	<p>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.</p> <p>Phosphorylated at Ser-56 by CDK5 during neutrophil secretion in the cytoplasm. Phosphorylated by STK33.</p> <p>O-glycosylated during cytokinesis at sites identical or close to phosphorylation sites, this interferes with the phosphorylation status.</p> <p>S-nitrosylation is induced by interferon-gamma and oxidatively-modified low-density lipoprotein (LDL(ox)) possibly implicating the iNOS-S100A8/9 transnitrosylase complex.</p>
<b>Cellular localization</b>	<p>Cytoplasm.</p>
<b>Form</b>	<p>Vimentin is found in connective tissue and in the cytoskeleton.</p>

## Images



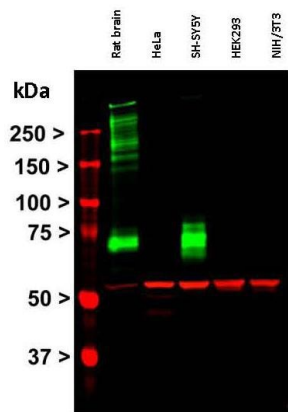
Immunocytochemistry/ Immunofluorescence - Anti-Vimentin antibody (ab24525)

Immunocytochemistry/ Immunofluorescence analysis of neuron/glia cultures labeling Vimentin with ab24525 (green) and GFAP with **ab7260** (red). Vimentin is the sole cytoplasmic intermediate filament subunit expressed in fibroblasts, microglial and endothelial cells. The flattened cells in the middle of the image which appear green are fibroblasts. Astrocytes may express primarily GFAP, or both GFAP and vimentin, and so appear red (GFAP only) or golden yellow (GFAP and Vimentin). In cells which express both GFAP and vimentin, the two proteins assemble to produce heteropolymer filaments.



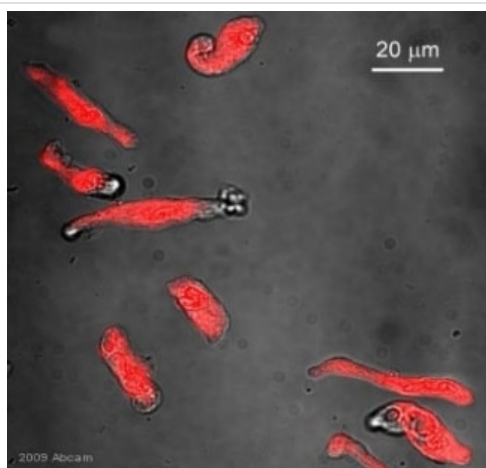
Immunocytochemistry/ Immunofluorescence - Anti-Vimentin antibody (ab24525)

Rat cerebral cortex cultures stained with chicken antibody to vimentin **ab24525** (green) and rabbit antibody to GFAP (red). Note flattened fibroblastic cells are mostly green (i.e. vimentin positive, GFAP negative), while clearly astrocytic cells, express both vimentin and GFAP and therefore appear golden or orange. Certain other cells express predominantly GFAP and therefore appear red.



Western blot - Anti-Vimentin antibody (ab24525)

Western blot of Rat whole brain extract, HeLa, SH-SY5Y, HEK293, and NIH/3T3 cells probed with ab24525, showing a single strong band at ~ 50kDa.



Immunocytochemistry/ Immunofluorescence - Anti-Vimentin antibody (ab24525)

This image is a courtesy of Anonymous Abreview

**ab24525** staining Vimentin in rat smooth muscle cells from mesenteric artery by Immunocytochemistry/ Immunofluorescence. Cells were fixed with 4% paraformaldehyde in physiological saline solution (PSS) 4 min at 4°C and permeabilized with 0.3% Triton x100 before blocking with 2% BSA was done for 30 minutes at 20°C. Samples were incubated with primary antibody (1/300: in PSS with 2% BSA and 0.3% Triton X-100) for 14 hours at 4°C. An Abcam's **ab6875**, goat **anti-chicken IgY Texas Red** was used as secondary antibody at 1/400 dilution.

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