


Product datasheet

Anti-Vimentin antibody ab137321

83 References 14 Images

Overview

Product name	Anti-Vimentin antibody
Description	Rabbit polyclonal to Vimentin
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF, IHC-P, IP
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Chicken, Guinea pig, Cow, Dog, Chimpanzee 
Immunogen	Recombinant fragment within Human Vimentin (internal sequence). The exact sequence is proprietary. Database link: P08670
Positive control	WB: HEK-293T, HeLa and NIH/3T3 whole cell lysates. U87-MG, SK-N-SH. IMR32 and SK-N-AS whole cell extracts. ICC/IF: HeLa cells. IHC-P: Adult mouse retina tissue. U373 xenograft tissue and RT2 rat xenograft tissue. IP: HeLa whole cell extract.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: PBS, 20% Glycerol
Purity	Affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab137321** in the following tested applications.

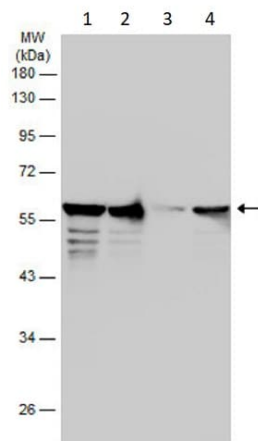
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 54 kDa.
ICC/IF		1/100 - 1/1000.
IHC-P		1/100 - 1/1000.
IP		Use at an assay dependent concentration.

Target

Function	<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>
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	<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>
Post-translational modifications	<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>
Cellular localization	Cytoplasm.
Form	Vimentin is found in connective tissue and in the cytoskeleton.

Images



Western blot - Anti-Vimentin antibody (ab137321)

All lanes : Anti-Vimentin antibody (ab137321) at 1/50000 dilution

Lane 1 : U87-MG (Human glioblastoma-astrocytoma epithelial cell line) whole cell extracts

Lane 2 : SK-N-SH (Human neuroblastoma cell line) whole cell extracts

Lane 3 : IMR32 whole cell extracts

Lane 4 : SK-N-AS whole cell extracts

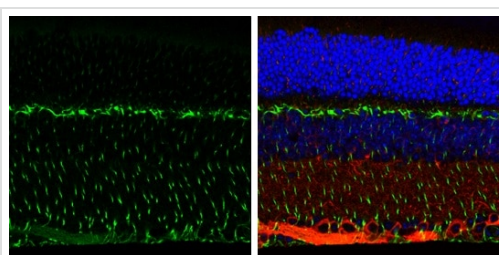
Lysates/proteins at 30 µg per lane.

Secondary

All lanes : HRP-conjugated anti-rabbit IgG

Predicted band size: 54 kDa

10% SDS-PAGE gel

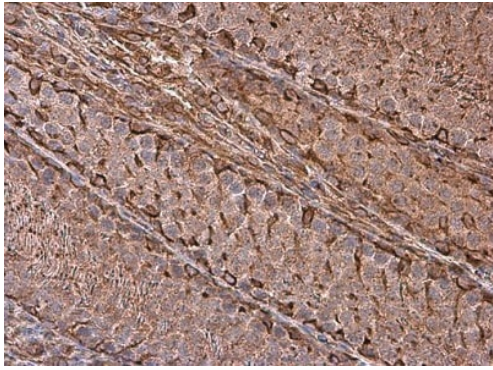


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Vimentin antibody (ab137321)

Paraffin-embedded adult mouse retina tissue stained for Vimentin with ab137321 (1/250 dilution) (green) in immunohistochemical analysis.

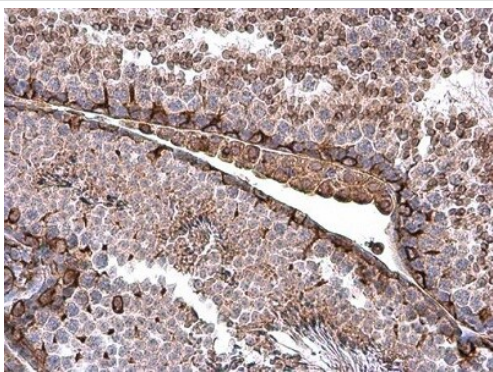
Red: beta Tubulin 3/ TUJ1, stained by beta Tubulin 3/ TUJ1 antibody [GT11710] diluted at 1:500.

Blue: Fluoroshield with DAPI.



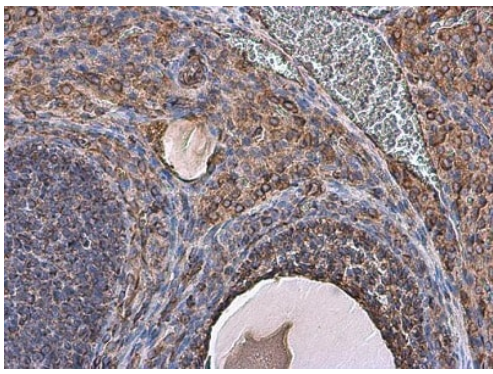
Paraffin-embedded rat testis tissue stained for Vimentin with ab137321 at a 1/500 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Vimentin antibody (ab137321)



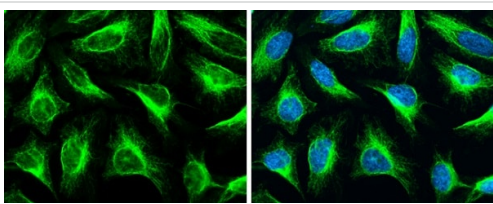
Paraffin-embedded mouse testis tissue stained for Vimentin with ab137321 at a 1/500 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Vimentin antibody (ab137321)



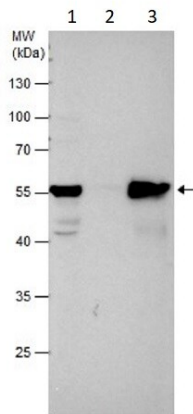
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Vimentin antibody (ab137321)

Paraffin-embedded mouse ovary tissue stained for Vimentin with ab137321 at a 1/500 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-Vimentin antibody (ab137321)

HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for Vimentin (green) using ab137321 (1/500 dilution) in ICC/IF. Cells were fixed in 4% paraformaldehyde at RT for 15 minutes. Counterstain: Hoechst 33342 (blue).



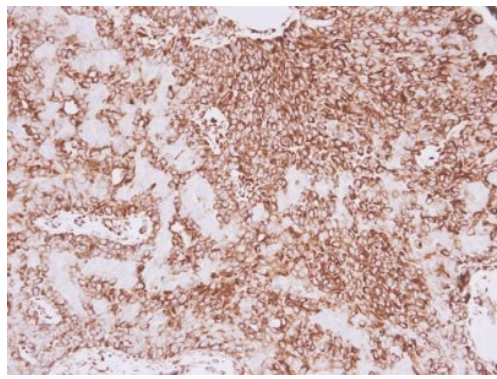
Immunoprecipitation - Anti-Vimentin antibody (ab137321)

Vimentin was immunoprecipitated from HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell extracts using 5 µg of ab137321.

Lane 1: HeLa whole cell extracts (Input).

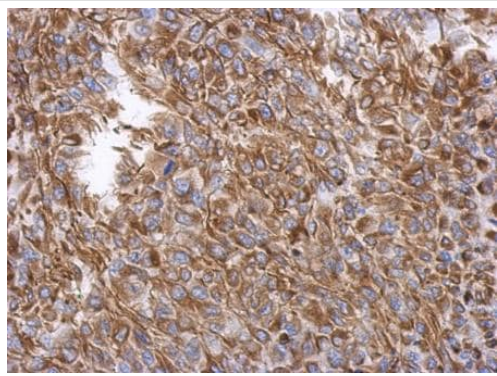
Lane 2: Control IgG in HeLa whole cell extracts.

Lane 3: Vimentin IP in HeLa whole cell extracts.



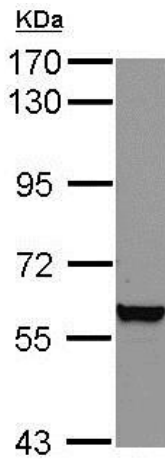
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Vimentin antibody (ab137321)

Paraffin-embedded human lung carcinoma tissue stained for Vimentin with ab137321 at a 1/500 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Vimentin antibody (ab137321)

Immunohistochemical analysis of paraffin-embedded, formalin-fixed RT2 rat xenograft tissue labeling Vimentin, using ab137321 at a 1/500 dilution.

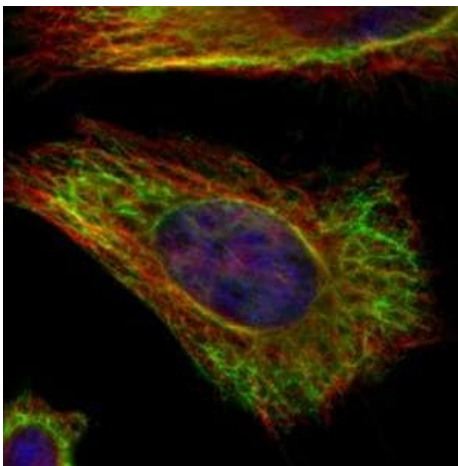


Western blot - Anti-Vimentin antibody (ab137321)

Anti-Vimentin antibody (ab137321) at 1/3000 dilution + HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 30 μ g

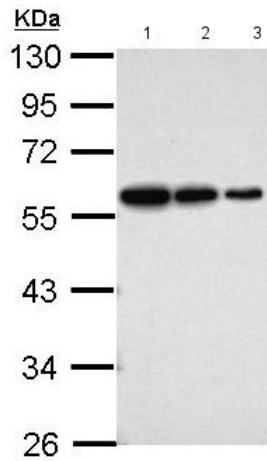
Predicted band size: 54 kDa

7.5% SDS PAGE



Immunocytochemistry/ Immunofluorescence - Anti-Vimentin antibody (ab137321)

Confocal immunofluorescence analysis of methanol-fixed HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Vimentin, using ab137321 (green) at a 1/500 dilution. Alpha-tubulin filaments were labelled with an anti-alpha tubulin antibody (red) at a 1/2000 dilution.



Western blot - Anti-Vimentin antibody (ab137321)

All lanes : Anti-Vimentin antibody (ab137321) at 1/3000 dilution

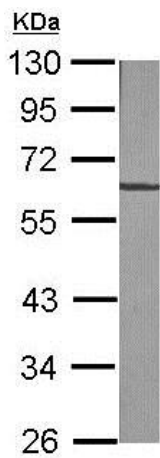
Lane 1 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 20 μ g

Lane 2 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 10 μ g

Lane 3 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate at 5 μ g

Predicted band size: 54 kDa

10% SDS PAGE

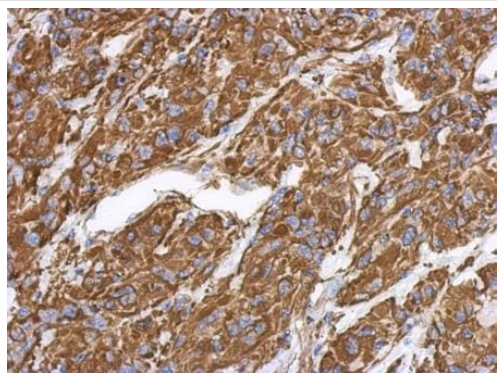


Western blot - Anti-Vimentin antibody (ab137321)

Anti-Vimentin antibody (ab137321) at 1/1000 dilution + NIH-3T3 (Mouse embryo fibroblast cell line) whole cell lysate at 30 μ g

Predicted band size: 54 kDa

10% SDS Page



Immunohistochemical analysis of paraffin-embedded, formalin-fixed U373 xenograft tissue labeling Vimentin, using ab137321 at a 1/500 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Vimentin antibody (ab137321)

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