

Anti-Vimentin antibody [SP20], prediluted ab27608

KO 評価済 RabMAb

10 References 画像数 5

製品の概要

製品名	Anti-Vimentin antibody [SP20], prediluted
製品の詳細	Rabbit monoclonal [SP20] to Vimentin, prediluted
由来種	Rabbit
アプリケーション	適用あり: Flow Cyt, WB, IHC-P, ICC/IF
種交差性	交差種: Human
免疫原	Recombinant full length protein corresponding to Human Vimentin.
ポジティブ・コントロール	WB: HeLa, U20S and human tonsil cell lysates. IHC-P: Human melanoma. Flow Cyt: HeLa cells.
特記事項	<p>This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.</p> <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&As</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C.
バッファー	<p>pH: 7.60</p> <p>Preservative: 0.1% Sodium azide</p> <p>Constituents: Tissue culture supernatant, Tris buffered saline, 1% BSA</p>
精製度	Tissue culture supernatant
ポリ/モノ	モノクローナル
クローン名	SP20
アイソタイプ	IgG

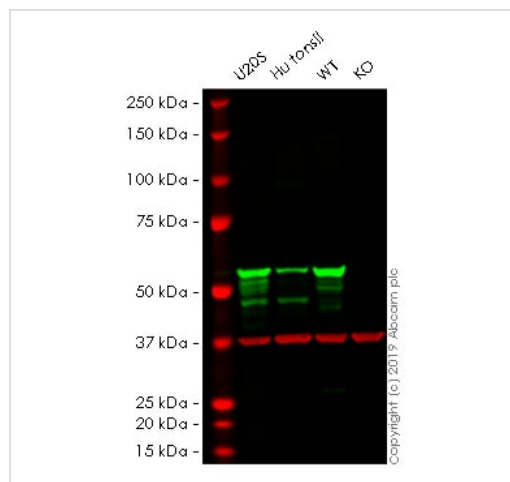
アプリケーション

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ab27608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
Flow Cyt		1/1. Use neat. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		Use at an assay dependent concentration. Predicted molecular weight: 53 kDa.
IHC-P		Use at an assay dependent concentration. Do not perform antigen retrieval.
ICC/IF		Use at an assay dependent concentration.

ターゲット情報

機能	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. 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-density 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.



Western blot - Anti-Vimentin antibody [SP20], prediluted (ab27608)

All lanes : Anti-Vimentin antibody [SP20] ([ab16700](#)) at 1/100 dilution

Lane 1 : U2OS cell lysate

Lane 2 : Human tonsil cell lysate

Lane 3 : Wild-type HeLa cell lysate

Lane 4 : VIM knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

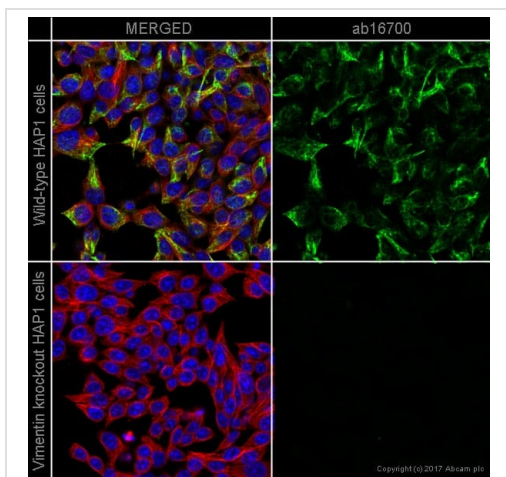
Predicted band size: 53 kDa

Observed band size: 53 kDa

This data was developed using the same antibody clone in a different buffer formulation ([ab16700](#)).

Lanes 1 - 4: Merged signal (red and green). Green - [ab16700](#) observed at 53 kDa. Red - loading control, [ab8245](#) observed at 37 kDa.

[ab16700](#) was shown to react with Vimentin in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab255446](#) (knockout cell lysate [ab263775](#)) was used. Wild-type and Vimentin knockout samples were subjected to SDS-PAGE. [ab16700](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 100 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

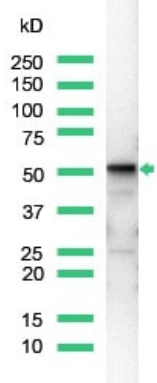


Immunocytochemistry/ Immunofluorescence - Anti-Vimentin antibody [SP20], prediluted (ab27608)

ab16700 staining Vimentin in wild-type HAP1 cells (top panel) and Vimentin knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with **ab16700** at 1/1000 dilution and **ab195889** at 1/250 dilution (shown in pseudo-color red) overnight at +4°C. The cells were then incubated with **ab150081** (Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488)) at 1/1000 dilution for 1 hour. Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This data was developed using the undiluted version of this antibody (**ab16700**).

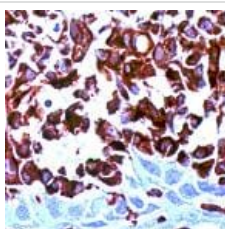


Western blot - Anti-Vimentin antibody [SP20], prediluted (ab27608)

Anti-MDM2 antibody [4B11] (**ab16900**) at 1/100 dilution + HeLa cell lysate

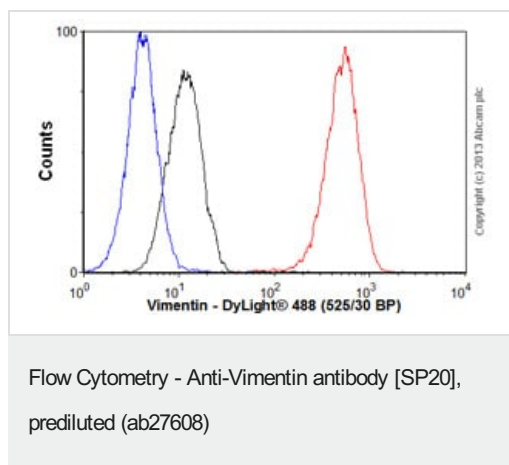
Predicted band size: 53 kDa
Observed band size: 53 kDa

This image refers to the non-prediluted version of this product (**ab16900**)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Vimentin antibody [SP20], prediluted (ab27608)

Human melanoma stained with prediluted ab27608.



Overlay histogram showing HeLa cells stained with ab27608 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab27608, neat) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) ([ab96899](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line). Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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