abcam

ab194719

Alexa Fluor® 647 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker

Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker - Alexa Fluor® 647 conjugated (ab194719) is a rabbit recombinant monoclonal antibody detecting Vimentin in **Flow Cytometry (Intra), ICC/IF**. Suitable for **Human, Mouse**.

- KO validated for confirmed specificity
- Biophysical QC for unrivalled batch-batch consistency

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 647
Excitation/Emission	Ex: 650nm, Em: 665nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR3776
Purification technique	Affinity purification Protein A
Dissociation constant	1.1×10^{-10} M
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Mouse
Dilution info	1/100 - 1/1000
Notes	-

Species	Human
Dilution info	1/100 - 1/1000
Notes	-

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/500
Notes	ab199093 - Rabbit monoclonal IgG (Alexa Fluor®; 647), is suitable for use as an isotype control with this antibody.

Species	Human
Dilution info	1/500
Notes	ab199093 - Rabbit monoclonal IgG (Alexa Fluor®; 647), is suitable for use as an isotype control with this antibody.

Expected

Species	Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information VIM

Function	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. Plays a role in cell directional movement, orientation, cell sheet organization and Golgi complex polarization at the cell migration front (By similarity). Protects SCRIB from proteasomal degradation and facilitates its localization to intermediate filaments in a cell contact-mediated manner (By similarity). May promote axon outgrowth and motor fiber repair via DSP-mediated recruitment to outgrowth tips (By similarity). Involved with LARP6 in the stabilization of type I collagen mRNAs for CO1A1 and CO1A2.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle, Store in the dark

Notes

What is this antibody validated in?
Alexa Fluor® 647 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab194719) is a rabbit recombinant monoclonal antibody and is validated for use in Flow Cytometry (Intra), Flow Cytometry (Flow Cyt), Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Mouse samples.

Related products
Antibody clone EPR3776 is also available pre-conjugated to a variety of labels for your convenience – Anti-Vimentin Alexa Fluor® 647 [EPR3776] - Cytoskeleton Marker (ab194719).

Specificity confirmed
The specificity of Alexa Fluor® 647 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab194719) has been confirmed by Immunocytochemistry testing in VIM Knockout HAP1 cells.

Other related products
We have a range of other formats of antibody clone [EPR3776] also available for your convenience: ab92547, Alexa Fluor® 594 - ab154207, Alexa Fluor® 488 - ab185030, Carrier free - ab193555, HRP - ab194718, Alexa Fluor® 647 - ab194719, Alexa Fluor® 568 - ab202504, Alexa Fluor® 555 - ab203428, PE - ab209446, Alexa Fluor® 405 - ab210152, Alexa Fluor® 568 - ab236866, Carrier free - ab307988, APC - ab314250, ab316214, Carrier free - ab316215, Alexa Fluor® 750 - ab321763, ab323238, Carrier free - ab323247

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

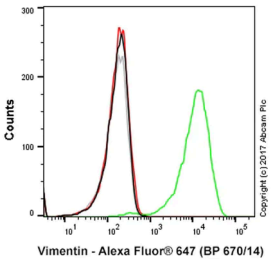
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

4 product images



Flow Cytometry (Intracellular) - Alexa Fluor® 647 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab194719)

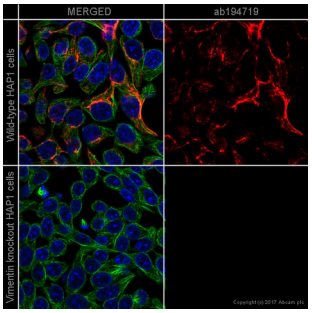
Vimentin Flow Cytometry (Intracellular) staining using rabbit Anti-Vimentin antibody

Overlay histogram showing HAP1 wildtype (green line) and HAP1-VIM knockout cells (red line) stained with ab194719. The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab194719, 0.01µg/ml dilution) for 30 min at 22°C.

A rabbit monoclonal IgG isotype control antibody (ab199093) was used at the same concentration and conditions as the primary antibody (HAP1 wildtype - black line, HAP1-VIM knockout - grey line). Unlabelled sample was also used as a control (this line is not shown for the purpose of simplicity).

Acquisition of >5,000 events were collected using a 40 mW Yellow/Green laser (640nm) and 670/14 bandpass filter.

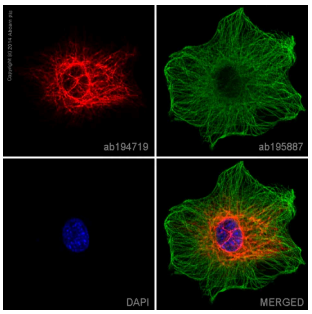
This antibody can also be used in HAP1 cells fixed with 4% formaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 15 min under the same conditions.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab194719)

Vimentin Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Vimentin antibody

ab194719 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 ab194719 at 1/1000 dilution (shown in red) and ab195887 at 1/250 dilution (shown in green) overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

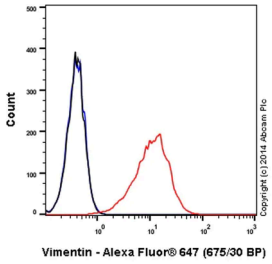


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab194719)

Vimentin Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Vimentin antibody

ab194719 staining Vimentin in NIH3T3 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized in 0.1% Triton X-100 for 5 minutes and then blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab194719 at 1/100 dilution(shown in red) and ab195887, Mouse monoclonal [DM1A] to alpha Tubulin (Alexa

Fluor® 488, shown in green) at 2µg/ml overnight at +4°C. Nuclear DNA was labelled in blue with DAPI.
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry (Intracellular) - Alexa Fluor® 647 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab194719)

Vimentin Flow Cytometry (Intracellular) staining using rabbit Anti-Vimentin antibody

Overlay histogram showing NIH3T3 cells stained with ab194719 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 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 (ab194719, 1/500 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) Alexa Fluor® 647 used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.
Acquisition of >5,000 events were collected using a solid-state 25mW red diode laser (635 nm) and 675/30 bandpass filter.

This antibody gave a positive signal in NIH3T3 fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Triton X-100 for 20 min used under the same conditions.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.