abcam

ab154207

Alexa Fluor® 594 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker

Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker - Alexa Fluor® 594 conjugated (ab154207) 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
- Over 10 publications

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 594
Excitation/Emission	Ex: 590nm, Em: 617nm
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 50% Glycerol (glycerin, glycerine), 0.05% 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
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	Human
Dilution info	1/0.1
Notes	-

Expected

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

IHC-P

Expected

Species	Mouse, Rat, Human
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® 594 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab154207) is a rabbit recombinant monoclonal antibody and is validated for use in Flow Cytometry (Intra), Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Mouse samples.

Trusted by the scientific community
Anti-Vimentin [EPR3776] - Cytoskeleton Marker Alexa Fluor® 594 (ab154207) was first used in a scientific publication in 2012 and has been cited over 10 times in peer-reviewed journals.

Related products
Antibody clone EPR3776 is also available pre-conjugated to a variety of labels for your convenience – Anti-Vimentin Alexa Fluor® 594 [EPR3776] - Cytoskeleton Marker (ab154207).

Specificity confirmed
The specificity of Alexa Fluor® 594 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab154207) 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

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

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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.

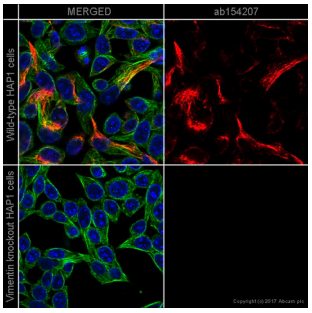
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In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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

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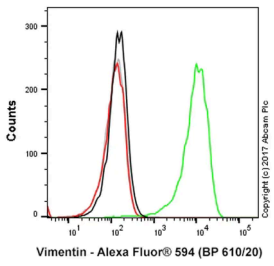
3 product images



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 594 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab154207)

Vimentin Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Vimentin antibody

ab154207 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 ab154207 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).



Flow Cytometry (Intracellular) - Alexa Fluor® 594 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab154207)

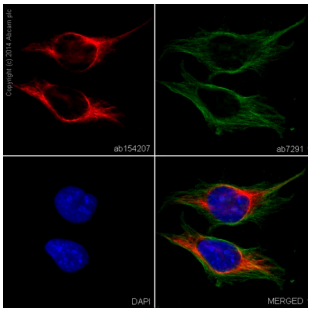
Vimentin Flow Cytometry (Intracellular) staining using rabbit Anti-Vimentin antibody

Overlay histogram showing HAP1 wildtype (green line) and HAP1-VIM knockout cells (red line) stained with ab154207. The cells were fixed with 4% formaldehyde (10 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 (ab154207, 0.1µg/ml dilution) for 30 min at 22°C.

A rabbit monoclonal IgG isotype control antibody (ab208568) 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 50 mW Yellow/Green laser (488nm) and 630/30 bandpass filter.

This antibody can also be used in HAP1 cells fixed with 80% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 15 min under the same conditions.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 594 Anti-Vimentin antibody [EPR3776] - Cytoskeleton Marker (ab154207)

Vimentin Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Vimentin antibody

ab154207 staining Vimentin in HeLa cells. The cells were fixed with 100% methanol (5min) 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 ab154207 at a working dilution of 1 in 100 (shown in pseudo color red) and ab7291 (Mouse monoclonal [DM1A] to alpha Tubulin) at 1µg/ml overnight at +4°C, followed by a further incubation at room temperature for 1h with an AlexaFluor® 488 Goat anti-Mouse secondary (ab150117) at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.

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