abcam

ab196454

Alexa Fluor® 488 Anti-Vinculin antibody [EPR8185]

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 488
Excitation/Emission	Ex: 495nm, Em: 519nm
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	EPR8185
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	Human

Dilution info	1/100
Notes	We recommend using this antibody with methanol fixation only. Use of paraformaldehyde fixation may result in non-specific signal. Use at a low concentration to minimize background. We have observed the best results in A431 and HeLa cells when using the antibody in the 0.04 µg/mL to 0.008 µg/mL range.

Species	Mouse
Dilution info	1/50
Notes	-

Species	Rat
Dilution info	1/50
Notes	-

Expected

Species	Mouse
Dilution info	1/50
Notes	-

Species	Rat
Dilution info	1/50
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/0.008
Notes	-

Species	Mouse
Dilution info	1/500
Notes	-

Species	Rat

Dilution info	1/500
Notes	-

Expected

Species	Human
Dilution info	1/0.008
Notes	-

Species	Mouse
Dilution info	1/500
Notes	-

Species	Rat
Dilution info	1/500
Notes	-

Target data

See full target information Vinculin

Function	Actin filament (F-actin)-binding protein involved in cell-matrix adhesion and cell-cell adhesion. Regulates cell-surface E-cadherin expression and potentiates mechanosensing by the E-cadherin complex. May also play important roles in cell morphology and locomotion.

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
Storage information	Avoid freeze / thaw cycle, Store in the dark

Notes

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.

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

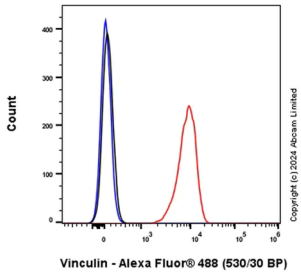
We do not recommend this combination. It is not covered by our product promise.

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.

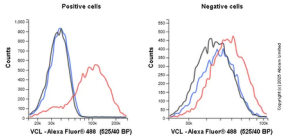
8 product images



Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-Vinculin antibody [EPR8185] (ab196454)

Vinculin Flow Cytometry (Intracellular) staining of HEK-293 (human embryonic kidney epithelial cells) using rabbit Anti-Vinculin antibody

Flow cytometry overlay histogram of 4% paraformaldehyde HEK-293 (human embryonic kidney epithelial cell) cells permeabilised with 90% methanol labelling Vinculin with ab196454 at 1/500 dilution (Red line) compared with a Rabbit monoclonal IgG (ab172730) as Isotype control (Black line) and an unlabelled control (cells without incubation with primary antibody) (Blue line).



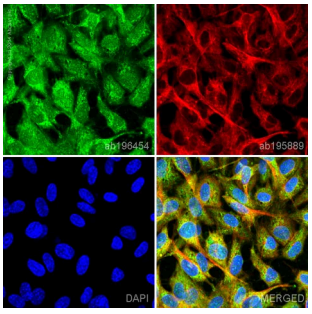
Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-Vinculin antibody [EPR8185] (ab196454)

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

Flow cytometry overlay histogram showing left HeLa positive cells and right negative HeLa VCL KO stained with ab196454 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab196454) (1x 10^6 in 100µl at 0.008µg/ml (1/62500)) for 30min at 22°C.

Isotype control antibody (black line) was Recombinant Alexa Fluor® 488 Rabbit IgG, monoclonal [EPR25A] - Isotype Control used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.

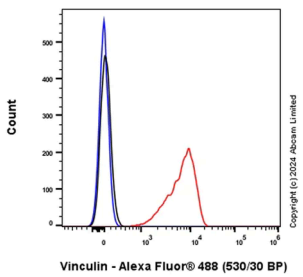


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Vinculin antibody [EPR8185] (ab196454)

Vinculin Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Vinculin antibody

ab196454 staining Vinculin in HUVEC cells. The cells were fixed with 4% formaldehyde (10 min), 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 overnight at +4°C with ab196454 at a 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at a 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

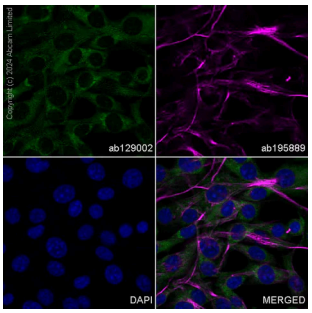
This product also gave a positive signal under the same testing conditions in HUVEC cells fixed with 100% methanol (5min).



Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-Vinculin antibody [EPR8185] (ab196454)

Vinculin Flow Cytometry (Intracellular) staining of C6 (rat glial tumor glial cells) using rabbit Anti-Vinculin antibody

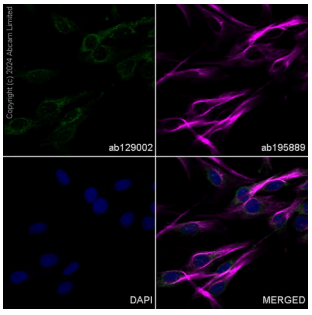
Flow cytometry overlay histogram of 4% paraformaldehyde C6 (rat glial tumor glial cell) cells permeabilised with 90% methanol labelling Vinculin with ab196454 at 1/500 dilution (Red line) compared with a Rabbit monoclonal IgG (ab172730) as Isotype control (Black line) and an unlabelled control (cells without incubation with primary antibody) (Blue line).



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Vinculin antibody [EPR8185] (ab196454)

Vinculin Immunocytochemistry/ Immunofluorescence staining of NIH/3T3 (mouse embryonic fibroblasts) using rabbit Anti-Vinculin antibody

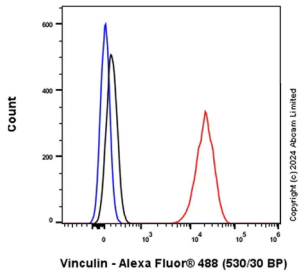
Immunofluorescent analysis of 100% methanol fixed NIH/3T3 (mouse embryonic fibroblasts) permeabilized using 0.1% Triton X-100 labelling Vinculin with ab196454 at 1/50 dilution (green). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) at 1/200 dilution (magenta) was used as a counterstain. Nuclear DNA was labelled with DAPI (shown in blue). Image showing cytoplasmic staining in NIH/3T3 cell line was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Vinculin antibody [EPR8185] (ab196454)

Vinculin Immunocytochemistry/ Immunofluorescence staining of C6 (rat glial tumor glial cells) using rabbit Anti-Vinculin antibody

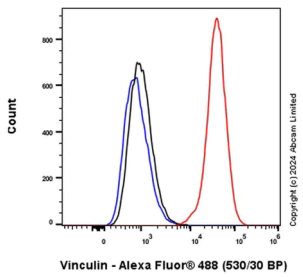
Immunofluorescent analysis of 100% methanol fixed C6 (rat glial tumor glial cell) permeabilized using 0.1% Triton X-100 labelling Vinculin with ab196454 used at 1/50 dilution (green). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) at 1/200 dilution (magenta) was used as a counterstain. Nuclear DNA was labelled with DAPI (shown in blue). Image showing cytoplasmic staining in C6 cell line was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-Vinculin antibody [EPR8185] (ab196454)

Vinculin Flow Cytometry (Intracellular) staining of NIH/3T3 (mouse embryonic fibroblasts) using rabbit Anti-Vinculin antibody

Flow cytometry overlay histogram of 4% paraformaldehyde NIH/3T3 (mouse embryonic fibroblast) cells permeabilised with 90% methanol labelling Vinculin with ab196454 at 1/500 dilution (Red line) compared with a Rabbit monoclonal IgG (ab172730) as Isotype control (Black line) and an unlabelled control (cells without incubation with primary antibody) (Blue line).



Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-Vinculin antibody [EPR8185] (ab196454)

Vinculin Flow Cytometry (Intracellular) staining of HUVEC (human umbilical vein endothelial cells) using rabbit Anti-Vinculin antibody

Flow cytometry overlay histogram of 4% paraformaldehyde HUVEC (human umbilical vein endothelial cell) cells permeabilised with 90% methanol labelling Vinculin with ab196454 at 1/500 dilution (Red line) compared with a Rabbit monoclonal IgG (ab172730) as Isotype control (Black line) and an unlabelled control (cells without incubation with primary antibody) (Blue line).

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