abcam

Product datasheet

Anti-PLVAP/PV-1 antibody [MECA-32] ab27853

Recombinant

12 References 5 Images

Overview

Product name Anti-PLVAP/PV-1 antibody [MECA-32]

Description Rat monoclonal [MECA-32] to PLVAP/PV-1

Host species Rat

Tested applications Suitable for: Flow Cyt, IHC-Fr, ICC/IF

Species reactivity Reacts with: Mouse

Immunogen Tissue, cells or virus corresponding to Mouse PLVAP/PV-1. Mouse lymph node stromal cells

Positive control ICC/IF and Flow Cyt: bEND.3 cells; IHC-Fr: Mouse large intestine tissue.

General notes This product has switched from a hybridoma to recombinant production method on 14th

December 2020.

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 production

For more information see here.

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 long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)

Purity Ion Exchange Chromatography

Clone number Meca-32

Isotype IgG2a

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Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab27853 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
Flow Cyt		Use 0.1µg for 10 ⁶ cells.
IHC-Fr		Use a concentration of 1 μg/ml.
ICC/IF		Use a concentration of 1 µg/ml.

Target

Function		Involved in the formation of stomatal and fenestral diaphragms of caveolae. May function in															
		microvascular permeability.															
	161 14	_															

Expressed in lung, kidney, heart, aorta, placenta, muscle, pituitary gland, adrenals, mammary Tissue specificity gland, bladder, lymph node, bone marrow, trachea, digestive tract, liver and tumor-associated

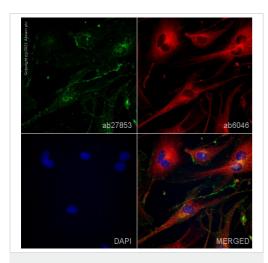
endothelium.

Cellular localization Cell membrane. Membrane > caveola. Cytoplasm > perinuclear region. Membrane-associated

protein of caveolae. Found in fenestral and stomatal diaphragms in fenestrated endothelia and

transendothelial channels. Also colocalized with CAV1 in perinuclear region.

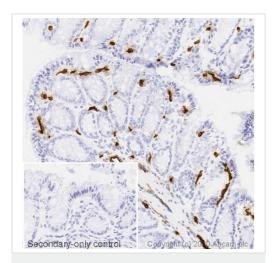
Images



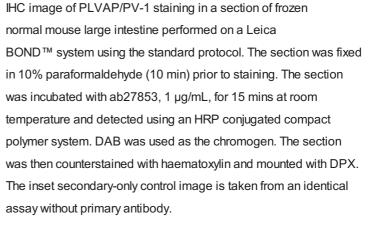
Immunocytochemistry/ Immunofluorescence - Anti-PLVAP/PV-1 antibody [MECA-32] (ab27853)

ab27853 staining PLVAP/PV-1 in b.End3 cells. The cells were fixed with 4% paraformaldehyde (10 minutes), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1 hour. The cells were then incubated overnight at 4°C with ab27853 at 2 µg/mL and ab6046, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with ab150165, Goat polyclonal Secondary Antibody to Rat IgG - H&L (Alexa Fluor® 488), pre-absorbed at 1/1000 dilution (shown in green) and ab150080, Goat polyclonal Secondary Antibody to Rabbit IgG -H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue). Also suitable in cells fixed with 100% methanol (5 minutes).

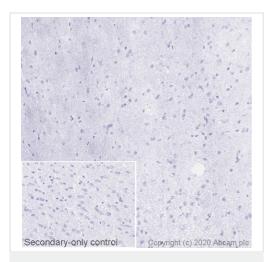
Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Immunohistochemistry (Frozen sections) - Anti-PLVAP/PV-1 antibody [MECA-32] (ab27853)



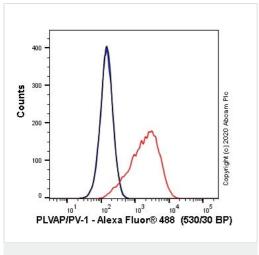
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunohistochemistry (Frozen sections) - Anti-PLVAP/PV-1 antibody [MECA-32] (ab27853)

IHC image of PLVAP/PV-1 staining in a section of frozen normal mouse brain performed on a Leica BOND™ system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab27853, 1 µg/mL, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody. Mouse brain tissue is a negative control tissue, showing no staining of the primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



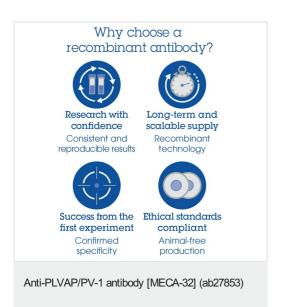
Flow Cytometry - Anti-PLVAP/PV-1 antibody [MECA-32] (ab27853)

Flow cytometry overlay histogram showing bEND.3 (mouse brain endothelioma cell line) cells stained with ab27853 (red line). The cells were incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab27853) (1x10 6 in 100 μ L at 1 μ g/mL) for 30 min on ice.

The secondary antibody Goat anti-rat lgG H&L (Alexa Fluor[®] 488, pre-adsorbed) (**ab150165**) was used at 1/2000 for 30 min on ice.

Isotype control antibody (black line) was Rat IgG2ak (<u>ab18450</u>) 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 530/30 bandpass filter.



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