abcam

Product datasheet

Anti-CD31 antibody ab28364

**** 156 Abreviews 2004 References 3 Images

Overview

Product name Anti-CD31 antibody

Description Rabbit polyclonal to CD31

Host species Rabbit

Specificity Customer feedback indicates that there might be some batch-to-batch variation with respect to

mouse cross-reactivity. We recommend ab124432 as an alternative antibody for mouse samples.

Please contact Abcam if you have any queries.

Tested applications Suitable for: IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Pig

Immunogen Synthetic peptide within Mouse CD31 aa 700 to the C-terminus (C terminal). The exact sequence

is proprietary.

Database link: Q08481

General notes This product is FOR RESEARCH USE ONLY. For commercial use, please contact

partnerships@abcam.com.

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.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C.

Storage buffer pH: 7.2

Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA

Purity Immunogen affinity purified

1

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab28364 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
IHC-P	★★★☆ (89)	1/50. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. The ideal fixation time will depend on the size of the tissue block and the type of tissue, but fixation between 18–24h is suitable for most samples. Positive Control: Hu tonsil tissue

Target

Function

Induces susceptibility to atherosclerosis (By similarity). Cell adhesion molecule which is required for leukocyte transendothelial migration (TEM) under most inflammatory conditions. Tyr-690 plays a critical role in TEM and is required for efficient trafficking of PECAM1 to and from the lateral border recycling compartment (LBRC) and is also essential for the LBRC membrane to be targeted around migrating leukocytes. Prevents phagocyte ingestion of closely apposed viable cells by transmitting 'detachment' signals, and changes function on apoptosis, promoting tethering of dying cells to phagocytes (the encounter of a viable cell with a phagocyte via the homophilic interaction of PECAM1 on both cell surfaces leads to the viable cell's active repulsion from the phagocyte. During apoptosis, the inside-out signaling of PECAM1 is somehow disabled so that the apoptotic cell does not actively reject the phagocyte anymore. The lack of this repulsion signal together with the interaction of the eat-me signals and their respective receptors causes the attachment of the apoptotic cell to the phagocyte, thus triggering the process of engulfment). Isoform Delta15 is unable to protect against apoptosis. Modulates BDKRB2 activation. Regulates bradykinin- and hyperosmotic shock-induced ERK1/2 activation in human umbilical cord vein cells (HUVEC).

Tissue specificity

Expressed on platelets and leukocytes and is primarily concentrated at the borders between endothelial cells. Isoform Long predominates in all tissues examined. Isoform Delta12 is detected only in trachea. Isoform Delta14-15 is only detected in lung. Isoform Delta14 is detected in all tissues examined with the strongest expression in heart. Isoform Delta15 is expressed in brain, testis, ovary, cell surface of platelets, human umbilical vein endothelial cells (HUVECs), Jurkat T-cell leukemia, human erythroleukemia (HEL) and U937 histiocytic lymphoma cell lines (at protein level).

Sequence similarities

Contains 6 lg-like C2-type (immunoglobulin-like) domains.

Domain

The Ig-like C2-type domains 2 and 3 contribute to formation of the complex with BDKRB2 and in regulation of its activity.

Post-translational modifications

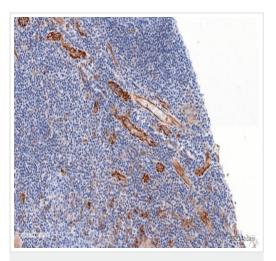
Phosphorylated on Ser and Tyr residues after cellular activation. In endothelial cells Fyn mediates mechanical-force (stretch or pull) induced tyrosine phosphorylation.

Cellular localization

Membrane. Cell junction. Localizes to the lateral border recycling compartment (LBRC) and

recycles from the LBRC to the junction in resting endothelial cells and Cell junction. Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells.

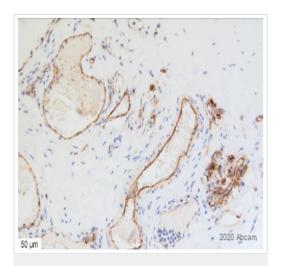
Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD31 antibody (ab28364)

This image is courtesy of an Abreview submitted by Mr. Victor Bernal.

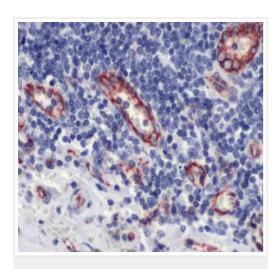
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling CD31 with ab28364 at 1/50 dilution (30 minutes at 23°C). 10% Neutral buffered formalin used as fixative. Heat mediated antigen retrieval was performed at 95°C for 20 minutes. Blocking performed using 2.5% serum for 20 minutes at 23°C. HRP-conjugated Goat Antirabbit was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD31 antibody (ab28364)

This image is courtesy of an anonymous Abreview.

Immunohistochemistry (PFA-fixed paraffin-embedded sections) analysis of human palatine tonsil tissue labelling CD31 with ab28364 at 1/50 dilution (15 hours at 4°C). Heat mediated antigen retrieval was performed using Tris/EDTA buffer. Blocking performed with 5% normal goat serum for 1 hour at 21°C. HRP-conjugated Goat Anti-Rabbit was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD31 antibody (ab28364)

ab28364 at 1/50 dillution staining CD31 in human tonsil tissue section by Immunohistochemistry (Formalin/ PFA fixed paraffin embedded tissue sections).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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