abcam

Product datasheet

Anti-CD31 antibody [SP164] - C-terminal ab227656

Recombinant RabMAb

14 Images

Overview

Product name	Anti-CD31 antibody [SP164] - C-terminal
Description	Rabbit monoclonal [SP164] to CD31 - C-terminal
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), IHC-P
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Pig
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Flow Cyt (Intra): Jurkat cells. IHC-P: Human tonsil, cervix, placenta, lymph node, lung, skin, skin squamous cell carcinoma, lung squamous cell carcinoma, stomach adenocarcinoma, prostate adenocarcinoma and breast ductal carcinoma tissues.
General notes	**This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.**

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: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Protein A/G purified
Purification notes	Purified from TCS by protein A/G.
Clonality	Monoclonal
Clone number	SP164
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab227656 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 (Intra)		1/20 - 1/100.
IHC-P		1/50. Perform heat mediated antigen retrieval with citrate buffer pH 6 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).

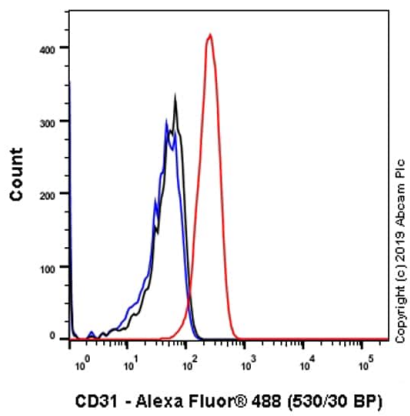
Sequence similarities Contains 6 Ig-like C2-type (immunoglobulin-like) domains.

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.

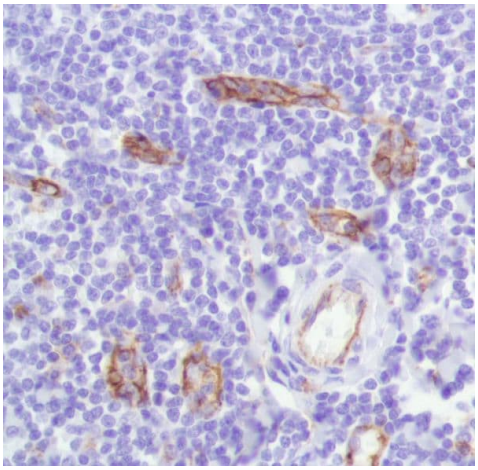
Cellular localization Membrane. Cell junction. Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction in resting endothelial cells and Cell junction. Localizes to the lateral border recycling compartment (LBRC) and recycles from the LBRC to the junction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

Images



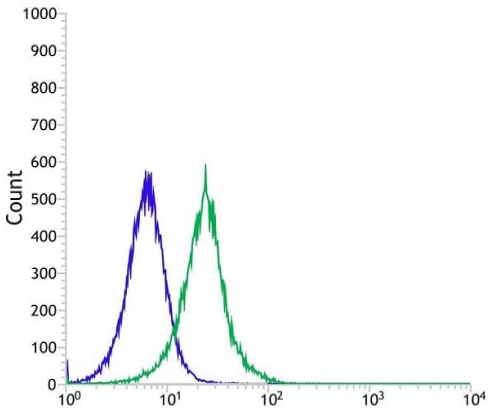
Flow Cytometry (Intracellular) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Flow cytometry analysis of Jurkat (Human T cell leukemia T lymphocyte) labeling CD31 with purified ab227656 at 1/20 dilution (5.6 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as a secondary antibody. Isotype control -Rabbit monoclonal IgG (**ab172730**) / Black. Unlableled control -Unlabelled cells / blue.



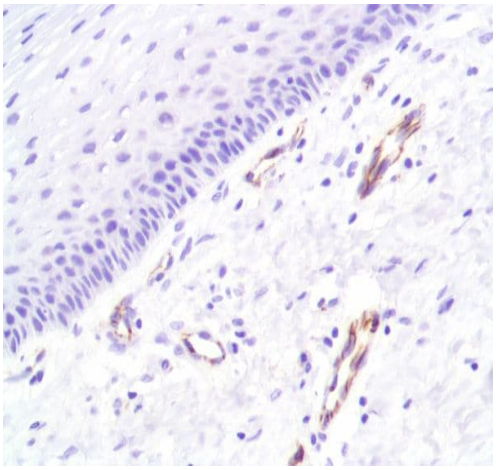
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Formalin-fixed, paraffin-embedded human tonsil tissue stained for CD31 using ab227656 at 1/50 dilution in immunohistochemical analysis.



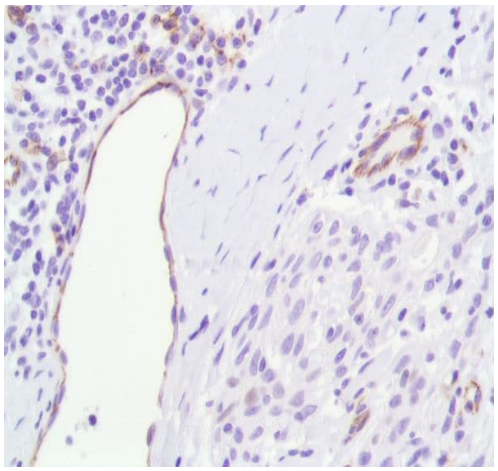
Flow Cytometry (Intracellular) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Flow cytometric analysis of Jurkat (human T cell leukemia cell line from peripheral blood) cell line labeling CD31 with ab227656 at 1/100 dilution (green) compared with a Rabbit IgG negative control (blue).



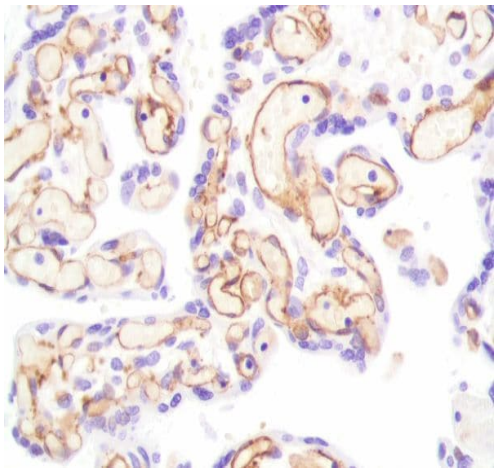
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Formalin-fixed, paraffin-embedded human cervix tissue stained for CD31 using ab227656 at 1/50 dilution in immunohistochemical analysis.



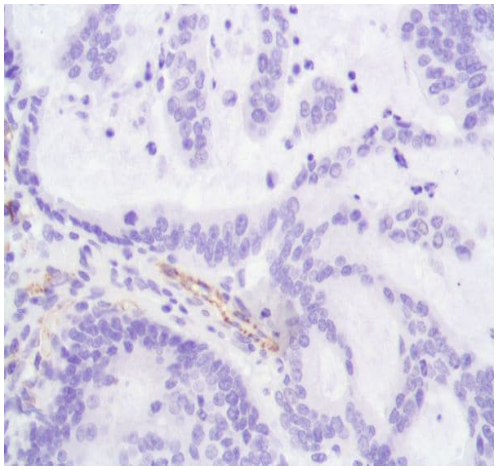
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Formalin-fixed, paraffin-embedded human skin squamous cell carcinoma tissue stained for CD31 using ab227656 at 1/50 dilution in immunohistochemical analysis.



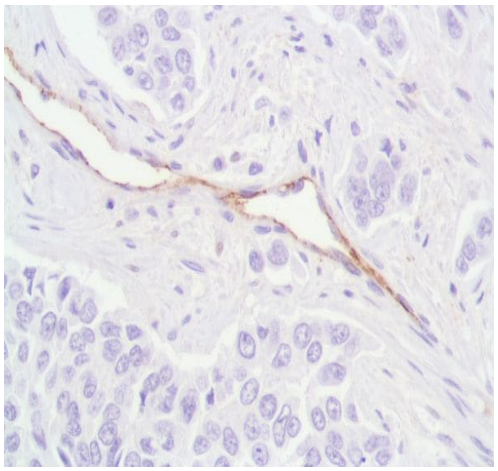
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Formalin-fixed, paraffin-embedded human placenta tissue stained for CD31 using ab227656 at 1/50 dilution in immunohistochemical analysis.



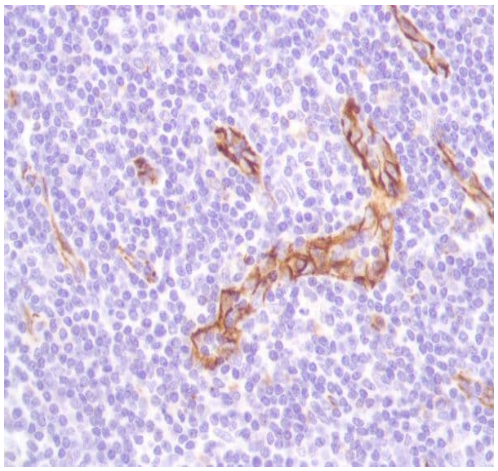
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Formalin-fixed, paraffin-embedded human stomach adenocarcinoma tissue stained for CD31 using ab227656 at 1/50 dilution in immunohistochemical analysis.



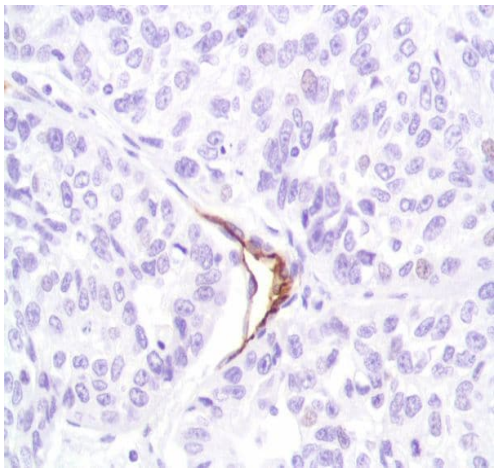
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Formalin-fixed, paraffin-embedded human breast ductal carcinoma tissue stained for CD31 using ab227656 at 1/50 dilution in immunohistochemical analysis.



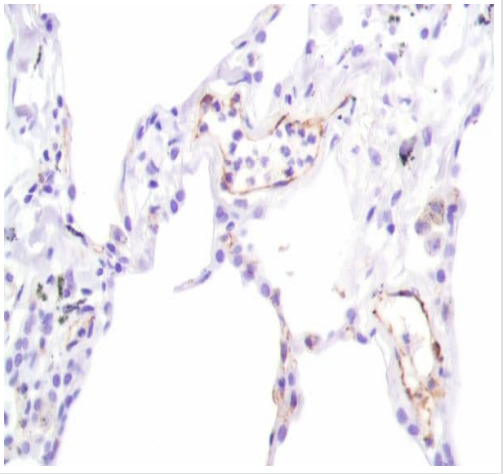
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Formalin-fixed, paraffin-embedded human lymph node tissue stained for CD31 using ab227656 at 1/50 dilution in immunohistochemical analysis.



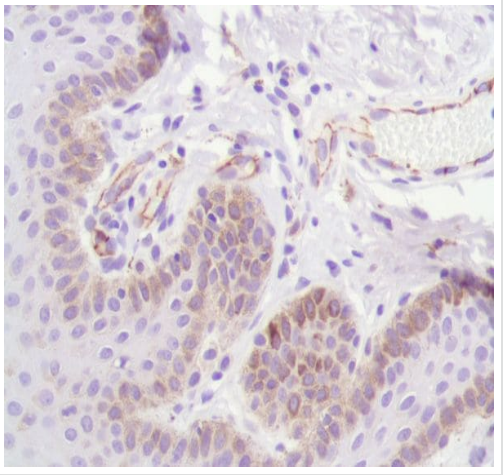
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Formalin-fixed, paraffin-embedded human lung squamous cell carcinoma tissue stained for CD31 using ab227656 at 1/50 dilution in immunohistochemical analysis.



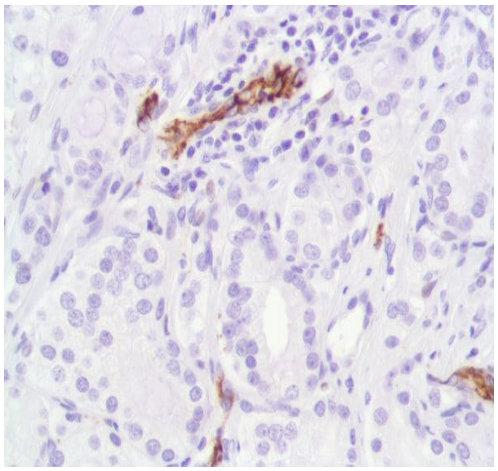
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Formalin-fixed, paraffin-embedded human lung tissue stained for CD31 using ab227656 at 1/50 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Formalin-fixed, paraffin-embedded human skin tissue stained for CD31 using ab227656 at 1/50 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD31 antibody [SP164] - C-terminal (ab227656)

Formalin-fixed, paraffin-embedded human prostate adenocarcinoma tissue stained for CD31 using ab227656 at 1/50 dilution in immunohistochemical analysis.

Anti-CD31 antibody [SP164] - C-terminal (ab227656)

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