# abcam

## Product datasheet

# Anti-CD31 antibody [B-B38] - BSA and Azide free ab46922

## 1 Image

#### Overview

Product name Anti-CD31 antibody [B-B38] - BSA and Azide free

**Description** Mouse monoclonal [B-B38] to CD31 - BSA and Azide free

Host species Mouse

**Specificity** This antibody is specific for CD31.

Tested applications Suitable for: Flow Cyt

Species reactivity Reacts with: Human

Immunogen Recombinant full length CD31 protein (Human)

**Positive control** Flow Cyt: Human platelet cells.

General notes

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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.30

Constituent: 100% PBS

Sterile-filtered through 0.22 µm. Carrier and preservative free

Carrier free Yes

**Purity** lon Exchange Chromatography

Purification notes Sterile-filtered through 0.22 μm and treated to remove endotoxins. Carrier and preservative free.

**Clonality** Monoclonal

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Clone number B-B38

Myeloma x63-Ag8.653

**lsotype** lgG1 **Light chain type** kappa

#### **Applications**

#### The Abpromise quarantee

Our Abpromise guarantee covers the use of ab46922 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 at an assay dependent concentration. <u>ab170190</u> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.

#### **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

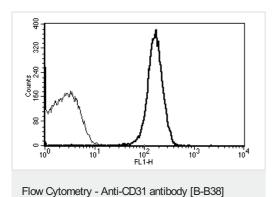
mechanical-force (stretch or pull) induced tyrosine phosphorylation.

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**

(ab46922)



Flow cytometry analysis staining CD31 in human platelet cells using **ab27333**.

This image was generated using the ascites version of the product.

This data was developed using the same antibody clone in a different buffer formulation.

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

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