

## Product datasheet

### Human CD31 Antibody Pair - BSA and Azide free (PECAM) ab256599

Recombinant RabMAb

2 Images

#### Overview

Product name	Human CD31 Antibody Pair - BSA and Azide free (PECAM)
Assay type	ELISA set
Range	226.6 pg/ml - 14500 pg/ml
Species reactivity	<b>Reacts with:</b> Human
Product overview	<p>The Antibody Pair can be used to quantify Human CD31. BSA and Azide free antibody pairs include unconjugated capture and detector antibodies suitable for sandwich ELISAs. The antibodies are provided at an approximate concentration of 1 mg/ml as measured by the protein A280 method. The recommended antibody orientation is based on internal optimization for ELISA-based assays. Antibody orientation is assay dependent and needs to be optimized for each assay type. Both capture and detector antibodies are rabbit monoclonal antibodies delivering consistent, specific, and sensitive results.</p> <p>For additional information on the performance of the antibody pair, see the equivalent SimpleStep ELISA® Kit (<b>ab190814</b>), which uses the same antibodies. However, due to differences in their formulation, this antibody pair cannot be used with the consumables provided with our SimpleStep ELISA Kits. Please note that the range provided for the pairs is only an estimation based on the performance of the related product using the same antibody pair. Performance of the antibody pair will depend on the specific characteristics of your assay. We guarantee the product works in sandwich ELISA, but we do not guarantee the sensitivity or dynamic range of the antibody pair in your assay.</p> <p>Download SDS <a href="#">here</a>.</p>
Tested applications	<b>Suitable for:</b> Sandwich ELISA
Platform	Reagents

#### Properties

Storage instructions	Store at +4°C. Please refer to protocols.
Carrier free	Yes

Components	10 x 96 tests
Human CD31 (PECAM) Capture Antibody (unconjugated)	1 x 100µg
Human CD31 (PECAM) Detector Antibody (unconjugated)	1 x 100µg


<b>Function</b>	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).
<b>Tissue specificity</b>	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).
<b>Sequence similarities</b>	Contains 6 Ig-like C2-type (immunoglobulin-like) domains.
<b>Domain</b>	The Ig-like C2-type domains 2 and 3 contribute to formation of the complex with BDKRB2 and in regulation of its activity.
<b>Post-translational modifications</b>	Phosphorylated on Ser and Tyr residues after cellular activation. In endothelial cells Fyn mediates mechanical-force (stretch or pull) induced tyrosine phosphorylation.
<b>Cellular localization</b>	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.

## Applications


**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab256599 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
<b>Sandwich ELISA</b>		Use at an assay dependent concentration.


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recombinant antibodies




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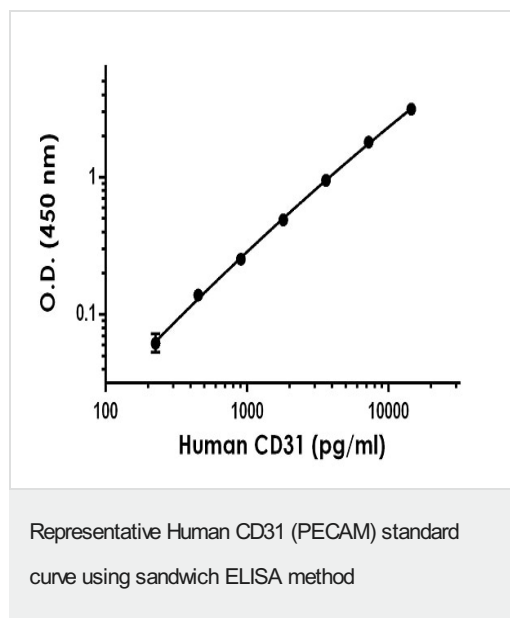
**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Sandwich ELISA - Human CD31 Antibody Pair -  
BSA and Azide free (PECAM) (ab256599)

To learn more about the advantages of recombinant antibodies see [here](#).



Representative standard curve from corresponding SimpleStep ELISA® Kit ([ab190814](#)), which uses the same antibody pair. For additional information on the performance of pair and kit, refer to the corresponding kit datasheet. Due to differences in the formulation and format of the antibodies in this pair, they cannot be used as substitutes for the antibody components in our SimpleStep ELISA® Kits.

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

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