

Recombinant human CD31 protein ab155607

1 Image

Description

Product name	Recombinant human CD31 protein
Biological activity	Measured by the ability of the immobilised protein to support the adhesion of Jurkat Human leukemic T cells. When cells are added to ab155607 coated plates (3.3 µg/ml, 100 µl/well) in the presence of PMA, approximately 35%-50% will adhere specifically after 30 minutes at 37°C.
Purity	> 95 % SDS-PAGE.
Endotoxin level	< 1.000 Eu/µg
Expression system	HEK 293 cells
Accession	<b><u>P16284</u></b>
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human

Sequence

QENSFTINSVDMKSLPDWTVQNGKNLTLCFADVSTTSH  
VKPQHQMFLFYK  
DDVLFYNISSMKSTESYFIPEVRIYDSGTYKCTVMNNKEKT  
TAEYQVLV  
EGVPSPRVTLDKKEAIQGGIVRVNCSVPEEKAPIHFTIEKL  
ELNEKMVKL  
KREKNSRDQNFVILEFPVEEQDRVLSFRCQARIISGIHMQT  
SESTKSELV  
TVTESFSTPKFHISPTGMIMEGAQLHIKCTIQVTHLAQEFPEI  
IIQKDKA  
VAHNRHGNKAVYSVMAMVEHSGNYTCKVESSRISKVSSI  
VVNITELFSK  
PELESSFTHLDQGERLNLSCSIPGAPPANFTIQKEDTIVSQ  
TQDFTKIAS  
KSDSGTYICTAGIDKVVKKSNTVQMVCEMLSQPRISYDAQ  
FEVIKGQTI  
EVRCESISGTLPISYQLLKTSKVLENSTKNSNDPAVFKDNP  
TEDVEYQCV  
ADNCHSHAKMLSEVLRVKVIAPVDEVQISILSSKVVESGE  
DVLQCAVNE  
GSGPITYKFYREKEGKPFYQMTSNATQAFWTKQKANKEQ

<b>Predicted molecular weight</b>	91 kDa including tags
<b>Molecular weight information</b>	The protein migrates as 105-130 kDa under reducing condition due to glycosylation.
<b>Amino acids</b>	28 to 601
<b>Tags</b>	Fc tag C-Terminus

## Specifications

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Our **Abpromise guarantee** covers the use of **ab155607** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	Functional Studies SDS-PAGE
<b>Form</b>	Lyophilized

## Preparation and Storage

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<b>Stability and Storage</b>	<p>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.</p> <p>pH: 7.4</p> <p>Constituents: 5% Trehalose, 0.75% Glycine, 0.61% Tris, Sodium chloride, L-Arginine</p> <p>Lyophilized from 0.22 µm filtered solution.</p> <p>5-10% trehalose is commonly used for freeze drying, and after reconstitution, the trehalose is mostly about 3-5%</p> <p>This product is an active protein and may elicit a biological response in vivo, handle with caution.</p>
<b>Reconstitution</b>	<p>It is recommended to reconstitute the lyophilized protein in sterile deionized water to a final concentration of 400 µg/ml. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Carrier protein (0.1% HSA or BSA) is strongly recommended for further dilution and long term storage.</p>

## General Info

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<b>Function</b>	<p>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</p>
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(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.

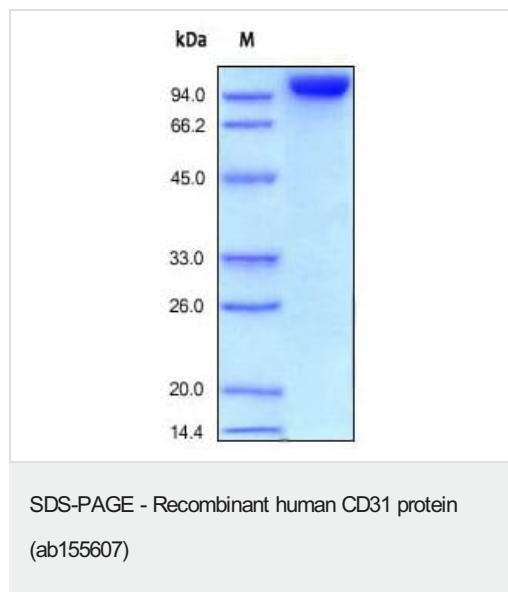
#### Post-translational modifications

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



SDS-PAGE analysis of reduced ab155607 stained overnight with Coomassie Blue.

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

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