

Product Information

Recombinant Anti-Human pecam1 Antibody scFv Fragment

Cat. No.: **MOM-18467-S(P)**

This product is for research use only and is not intended for diagnostic use.

Product Overview

Recombinant Mouse Antibody scFv Fragment is directed against Human PECAM1, expressed in E. coli

Antigen Description

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).

Specific Activity

Tested positive against native antigen.

Target

PECAM1

Immunogen

Tissue / cell preparation (Human) - IL-1beta activated human umbilical vein endothelial cells (HUVECs).

Source

Mouse

Species Reactivity

Human

Type

scFv

Expression Host

E. coli

Purity

>95.0% as determined by Analysis by RP-HPLC & analysis by SDS-PAGE.

Applications

Suitable for use in ELISA, WB, Neut and most other immunological methods.

Storage

At -20°C for one year.

ANTIGEN GENE INFORMATION

Gene Name

[PECAM1 platelet/endothelial cell adhesion molecule 1 \[Homo sapiens \]](#)

Official Symbol

PECAM1

Synonyms

PECAM1; platelet/endothelial cell adhesion molecule 1; platelet/endothelial cell adhesion molecule; platelet endothelial cell adhesion molecule; CD31; CD31 antigen; PECA1; GPIIA; PECAM-1; end $\geq$ CAM; CD31/End $\geq$ CAM; FLJ34100; FLJ58394

Gene ID

[5175](#)

mRNA Refseq

[NM_000442](#)

Protein Refseq

[NP_000433](#)

MIM

[173445](#)

UniProt ID

P16284

Chromosome Location

17q23.3

Pathway

Cell adhesion molecules (CAMs), organism-specific biosystem; Cell adhesion molecules (CAMs), conserved biosystem; Cell surface interactions at the vascular wall, organism-specific biosystem; Hemostasis, organism-specific biosystem; Integrin cell surface interactions, organism-specific biosystem; Leukocyte transendothelial migration, organism-specific biosystem; Leukocyte transendothelial migration, conserved biosystem;

Function

protein binding;