

# **Product Information**

# Recombinant Anti-Human pecam1 Antibody Fab Fragment

Cat. No.: MOM-18467-F(E)

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

#### **Product Overview**

Recombinant Mouse Antibody Fab Fragment specifically binds to Human PECAM1, expressed in Chinese Hamster Ovary cells(CHO)

### **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

Fab

# **Expression Host**

CHO

#### **Purity**

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

#### **Applications**

Suitable for use in FC, IP, ELISA, Neut, FuncS, IF and most other immunological methods.

# **Storage**

4°C. For long term storage, aliquot and store at -20°C. Repeated thawing and freezing must be avoided.

#### **ANTIGEN GENE INFOMATION**

#### **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掳CAM; CD31/End掳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;