

## **Product datasheet for TR512058**

## Pecam1 Mouse shRNA Plasmid (Locus ID 18613)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Pecam1 Mouse shRNA Plasmid (Locus ID 18613)

**Locus ID:** 18613

Synonyms: C85791; Cd31; Pecam; PECAM-1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Furomycin

Format: Retroviral plasmids

Components: Pecam1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

18613). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: BC008519, BC085502, NM 001032378, NM 001305157, NM 001305158, NM 008816,

NM 001032378.1, NM 008816.1, NM 008816.2, NM 008816.3

UniProt ID: Q08481

Summary: Cell adhesion molecule which is required for leukocyte transendothelial migration (TEM)

under most inflammatory conditions (By similarity). Tyr-679 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 (By similarity). Trans-homophilic interaction may play a role in

endothelial cell-cell adhesion via cell junctions (By similarity). Heterophilic interaction with CD177 plays a role in transendothelial migration of neutrophils (By similarity). Homophilic ligation of PECAM1 prevents macrophage-mediated phagocytosis of neighboring viable leukocytes by transmitting a detachment signal (By similarity). Promotes macrophage-mediated phagocytosis of apoptotic leukocytes by tethering them to the phagocytic cells; PECAM1-mediated detachment signal appears to be disabled in apoptotic leukocytes (By similarity). Modulates bradykinin receptor BDKRB2 activation (By similarity). Regulates bradykinin- and hyperosmotic shock-induced ERK1/2 activation in endothelial cells (By similarity). Induces susceptibility to atherosclerosis (PubMed:19048083).[UniProtKB/Swiss-

Prot Function]



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shRNA Design:

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact <a href="techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

**Performance Guaranteed:** 

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).