

## Product datasheet for **MR227044**

### **Pecam1 (NM\_008816) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pecam1 (NM_008816) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pecam1
Synonyms:	C85791; Cd31; Pecam; PECAM-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MR227044 representing NM\_008816  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCTCCTGGCTCTGGGACTCACGCTGGTGTCTATGCAAGCCTCCAGGCTGAGGAAAACCTTCCACCA  
TCAACAGCATCCATATGGAAAGCCTGCCATCATGGGAGGTGATGAATGGGCAGCAACTGACCCTGGAGTG  
CCTTGTGGACATCAGCACCACTCGAAAAGCAGGTCTCAGCACCGGGTGTGTTCTATAAGGACGATGCG  
ATGGTGTATAACGTCACCTCCAGGGAGCACACCGAGAGCTACGTCATTCTCAGGCTCGGGTCTTCCACT  
CCGGGAAGTACAAATGCACAGTATGCTGAACAACAAGGAAAAACCACGATTGAGTACGAGGTGAAGGT  
GCATGGCGTATCCAAGCCCAAGGTGACTGGACAAAAAGGAGGTGACAGAAGCGGGGTCGTGACGGTC  
AATTGTTCTTGAAGAAGAAAAGCCACCGATCTTTTTAAAATTGAAAAATTAGAAGTGGGGACAAAGT  
TTGTCAAGCGAAGGATAGATAAGACCTCCAACGAGAACTTGTGCTCATGGAATCCCCATTGAGGCGCA  
GGACCAGTGTTAGTGTTCGCTGCCAAGCTGGGATCCTGTCCGATTCAAATTGCAGGAGTCAGAACCC  
ATCAGGAGTGAATACGTCACCGTGCAGGAGTCTTCTCCACTCCCAAGTTTGAATCAAGCCCCCTGGGA  
TGATCATAGAAGGGGACCACTGCACATTAGGTGCATAGTTCAAGTGACACACTTGGTCCAGGAGTTTAC  
AGAAATATCATCAAAAAGACAAGGCGATTGTAGCCACCTCAAAGCAAAGCAGTGAAGCTGTCTACTCA  
GTCATGGCCATGGTTCGAGTACAGTGGACACTACACCTGCAAAGTGGAAATCAAACCGTATCTCAAAGCCA  
GTAGCATCATGGTCAACATAACAGAGCTGTTTCCCAAGCCGAAGTTAGAGTTCTCCTCCAGTCGTCTGGA  
CCAAGGGAGTTGTTGGACCTGTCTGCTCCGTCCTCGGCCACACCTGTAGCCAACTTCCCATCCAGAAG  
GAAGAGACGGTCTTGTGCGAGTATCAGAATTCAGCAAGATCGCCGAGGAGAGTGACAGCGGGGAGTACA  
GCTGTACTGCAGGCATCGGCAAAGTGGTCAAGAGAAGCGGCCTGGTACCGATCCAGGTGTGCGAAATGCT  
CTCGAAGCCCAAGTATTTTCATGATGCCAAGTCTGAGATCATAAAAAGGACATGCCATAGGCATCAGCTGC  
CAGTCCGAAAATGGAAGTGCACCCATCACTTACCACCTTATGAAAGCAAAGAGTGACTTCCAGACTCTCG  
AGGTGACCTCAAATGACCCAGCAACATTCACAGATAAGCCACCAGAGACATGGAATACCAGTGCAGAGC  
GGATAATTGCCATCCCACCCCGCGGTGTTTCAGCGAGATCCTGAGGGTCAGGGTATAGCCCCAGTGGAT  
GAAGTTGTGATTTCCATCCTGTCGAGTAACGAGGTACAGTCTGGAAGTGAATGGTACTTCGGTGTCTG  
TGAAAGAGGGGACGAGCCCAATCAGTTTTAGTTTTACAAGAAAAGGAGGACAGACCCTTCCACCAAGC  
GGTCGTGAATGACACCCAAGCGTTTTGGCACAACAACAAGCTAGCAAGAAGCAGGAAGGACAGTACTAC  
TGTACAGCCTCCAACAGAGCCAGCAGTATGAGGACCAGTCCCGAAGCAGCACTTTCAGTGCAGTGTCT  
TCCTTGCCCATGGAAGAAAGGGCTCATTGCGGTGGTTGTCATTGGAGTGGTTCATCGCCACCTTAATAGT  
TGCAGCCAAATGTAATCTCTGAGGAAAGCCAAGGCCAAACAGAAACCCGTGGAGATGTCCAGGCCAGT  
GCTCCACTTCTGAACTCCAACAGCGAGAAGATTTCTGAGCCTAGTGTGGAAGCCAACAGCCATTACGGTT  
ATGATGATGTTTCTGAAATGATGCAGTAAACCATAAATCAAATAAAGACCCCCAGAACATGGATGT  
AGAATACACAGAAGTGAAGTGTCTCCCTTGAGCCTACCAAGCTCTGGGAACGAGAGCCACAGAGACG  
GTGTACAGTGAGATCCGGAAGGTGACCCTAAGAACGGAAGGCTCCCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR227044 representing NM\_008816  
 Red=Cloning site Green=Tags(s)

MLLALGLTLVLYASLQAEENSFTINSIHMESLPSWEVMNGQQLTLECLVDISTTSKRSRQHRVLFYKDDA  
 MVYNVTSREHTESYVIPQARVFHSGKYKCTVMLNNKEKTTIEYEVKVHGVSKPKVTLDDKEVTEGGVTV  
 NCSLQEEKPIFFKIEKLEVGTFVKRRIDKTSNENFVLMFEPPIEAQDHVLFRCQAGILSGFKLQSESP  
 IRSEYVTVQESFSTPKFEIKPPGMIIEGDQLHIRCIVQVTHLVQEFTEIIIQKDKAIVATSKQSSEAVYS  
 VMAMVEYSGHYTCKVESNRIKASSIMVNITELFPKPKLEFSSSRLDQGEILLDLSCSVSGTPVANFTIQK  
 EETVLSQYQNFSKIAEESDSGEYSCTAGIGKVVKRSLVPIQVCEMLSKPSIFHDAKSEIIGKHAIGISC  
 QSENGTAPITYHLMKAKSDFQTLVTSNDPATFTDKPTRDMEYQCRADNCHSHPAVFSEILRVRVIAPVD  
 EVVISILSSNEVQSGSEMVLRCVKEGTSPITTFQFYKEKEDRPFHQAVVNDTQAFWHNKQASKKQEGQYY  
 CTASNRRASSMRTSPRSSTLAVRVFLAPWKKGLIAVVVIGVVIATLIVAACYFLRKAKAKQKPVEMSRPA  
 APLLNSNSEKISEPSVEANSHYGYDDVSGNDAVKPINQNKDPQNMDEVEYTEVSSLEPHQALGTRATET  
 VYSEIRKVDPKNGRLP

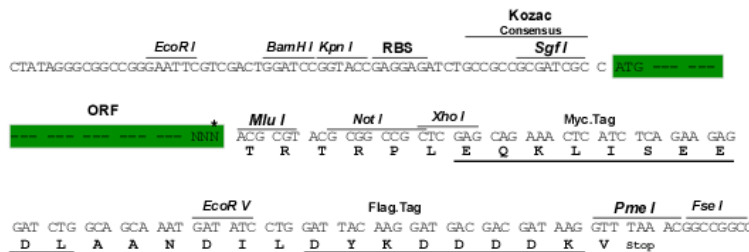
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9004\\_e09.zip](https://cdn.origene.com/chromatograms/mm9004_e09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_008816

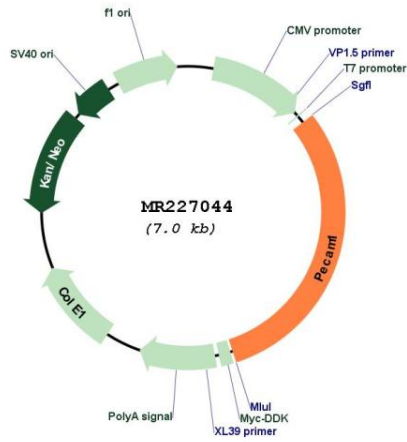
**ORF Size:** 2148 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_008816.3</a></u>
<b>RefSeq Size:</b>	3305 bp
<b>RefSeq ORF:</b>	2151 bp
<b>Locus ID:</b>	18613
<b>UniProt ID:</b>	<u><a href="#">Q08481</a></u>
<b>Cytogenetics:</b>	11 E1
<b>MW:</b>	80.5 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for MR227044