

Product datasheet for **MG210101**

Pecam1 (NM_001032378) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pecam1 (NM_001032378) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pecam1
Synonyms:	C85791; Cd31; Pecam; PECAM-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>MG210101 representing NM_001032378
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGCTCCTGGCTCTGGGACTCACGCTGGTGTCTATGCAAGCCTCCAGGCTGAGGAAAACCTTCCACCA
TCAACAGCATCCATATGGAAAGCCTGCCATCATGGGAGGTGATGAATGGGCAGCAACTGACCCTGGAGTG
CCTTGTGGACATCAGCACCACTCGAAAAGCAGGTCTCAGCACCGGGTGTGTTCTATAAGGACGATGCG
ATGGTGTATAACGTCACCTCCAGGGAGCACACCGAGAGCTACGTCATTCCTCAGGCTCGGGTCTTCCACT
CCGGGAAGTACAAATGCACAGTGATGCTGAACAACAAGGAAAAACCACGATTGAGTACGAGGTGAAGGT
GCATGGCGTATCCAAGCCCAAGGTGACACTGGACAAAAAGGAGGTGACAGAAGCGGGGTCGTGACGGTC
AATTGTTCTTGAAGAAGAAAAGCCACCGATCTTTTTTAAAATTGAAAAATTAGAAGTGGGGACAAAGT
TTGTCAAGCGAAGGATAGATAAGACCTCCAACGAGAATTTGTGCTCATGGAATCCCCATTGAGGCGCA
GGACCAGTGTTAGTGTTCGCTGCCAAGCTGGGATCCTGTCCGATTCAAATTGCAGGAGTCAGAACCC
ATCAGGAGTGAATACGTCACCGTGCAGGAGTCTTCTCCACTCCCAAGTTTGAATCAAGCCCCCTGGGA
TGATCATAGAAGGGGACCACTGCACATTAGGTGCATAGTTCAAGTGACACACTTGGTCCAGGAGTTTAC
AGAAATTATCATCAAAAAGACAAGGCGATTGTAGCCACCTCAAAGCAAAGCAGTGAAGCTGTCTACTCA
GTCATGGCCATGGTTCGAGTACAGTGGACACTACACCTGCAAAGTGGAAATCAAACCGTATCTCAAAGCCA
GTAGCATCATGGTCAACATAACAGAGCTGTTTCCCAAGCCGAAGTTAGAGTTCTCCTCCAGTCGTCTGGA
CCAAGGGAGTTGTTGGACCTGTCTGCTCCGTCCTCGGCCACACCTGTAGCCAATTCACCATCCAGAAG
GAAGAGACGGTCTTGTGCGAGTATCAGAATTCAGCAAGATCGCCGAGGAGAGTGACAGCGGGGAGTACA
GCTGTACTGCAGGCATCGGCAAAGTGGTCAAGAGAAGCGGCCTGGTACCGATCCAGGTGTGCGAAATGCT
CTCGAAGCCAGTATTTTTCATGATGCCAAGTCTGAGATCATAAAAAGGACATGCCATAGGCATCAGCTGC
CAGTCCGAAAATGGAAGTGCACCCATCACTTACCACCTTATGAAAGCAAAGAGTGACTTCCAGACTCTCG
AGGTGACCTCAAATGACCAGCAACATTACAGATAAGCCACCAGAGACATGGAATACCAGTGCAGAGC
GGATAATTGCCATCCCACCCGCGGTGTTTCAGCGAGATCCTGAGGGTCAGGGTATAGCCCCAGTGGAT
GAAGTTGTGATTTCCATCCTGTCGAGTAACGAGGTACAGTCTGGAAGTGAATGGTACTTCGGTGTCTG
TGAAAGAGGGGACGAGCCAATCAGTTCAGTTTTACAAGAAAAGGAGGACAGACCCTTCCACCAAGC
GGTCGTGAATGACACCAAGCGTTTTGGCACAACAACAAGCTAGCAAGAAGCAGGAAGGACAGTACTAC
TGTACAGCCTCCAACAGAGCCAGCAGTATGAGGACCAGTCCCGAAGCAGCACTTTCAGTGCAGTGTCT
TCCTTGCCCATGGAAGAAAGGGCTCATTGCGGTGGTTGTATTGGAGTGGTTCATCGCCACCTTAATAGT
TGACGCCAAATGTAATCTCTGAGGAAAGCCAAGGCCAAACAGAAACCCGTGGAGATGTCCAGGCCAGT
GCTCCACTTCTGAACTCCAACAGCGAGAAGATTTCTGAGCCTAGTGTGGAAGCCAACAGCCATTACGGTT
ATGATGATGTTTCTGAAATGATGCAGTAAACCATAAATCAAATAAAGACCCCCAGAACATGGATGT
AGAATACACAGAAGTGAAGTGTCTCCCTTGAGCCTACCAAGAGAACGGAAGGCTCCCT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG210101 representing NM_001032378
 Red=Cloning site Green=Tags(s)

MLLALGLTLVLYASLQAEENSFTINSIHMESLPSWEVMNGQQLTLECLVDISTTSKRSRQHRVLFYKDDA
 MVYNVTSREHTESYVIPQARVVFHSGKYKCTVMLNNKEKTTIEYEVKVHGVSKPKVTLDDKKEVTEGGVVTV
 NCSLQEEKPIFFKIEKLEVGTFVKRRIDKTSNENFVLMFEPPIEAQDHLVFRQCAGILSGFKLQESSEP
 IRSEYVTVQESFSTPKFEIKPPGMIIIEGDLHIRCIVQVTHLVQEFTEIIIQKDKAIVATSKQSSEAVYS
 VMAMVEYSGHYTCKVESNRI SKASSIMVNITELFPKPKLEFSSSRLDQGEALLDLSCSVSGTPVANFTIQK
 EETVLSQYQNFASKIAEESDSGEYSCTAGIGKVVKRSLVPIQVCEMLSKPSIFHDAKSEI IKGHAIGISC
 QSENGTAPITYHLMKAKSDFQTLLEVTSNDPATFTDKPTRDMEYQCRADNCHSHPAVFSEILRVRVIAPVD
 EVVISILSSNEVQSGSEMVLRCVKEGTSPITTFQFYKEKEDRPFHQAVVNDTQAFWHNKQASKKQEGQYY
 CTASNRRASSMRTSPRSSTLAVRVFLAPWKKGLIAVVVIGVVIATLIVAACYFLRKAKAKQKPVEMSRPA
 APLLNSNSEKISEPSVEANSHYGYDDVSGNDAVKPINQNKDPQNMDVEYTEVEVSSLEPHQENGRLP

TRTRPLE - GFP Tag - V

Restriction Sites:

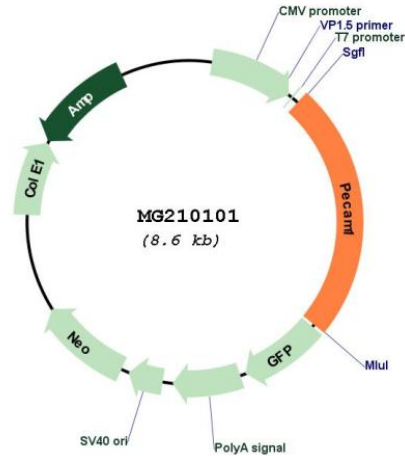
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001032378

ORF Size: 2091 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.

Components: 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).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

RefSeq: [NM_001032378.2](#)

RefSeq Size: 3248 bp

RefSeq ORF: 2094 bp

Locus ID: 18613

UniProt ID: [Q08481](#)

Cytogenetics: 11 E1

Gene 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]