

Product datasheet for MC201786

Pdpn (NM_010329) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pdpn (NM_010329) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pdpn
Synonyms:	Gp38; OTS-8; RANDAM-2; T1-alpha; T1a; T1alpha
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC026551 sequence for NM_010329
GCTTGCTGCCTCTGCGAGTCCAGAAAGCCCGGGCACTCTCTGGCGCTGAGACTTTTGCTCAGCGCCTTCC
AACCTCCTCCCGAGCTCTCCCGCTGGGCTGTGGCTTCGAAGTTTTTGTGGTTTGTGGTTTTCATC
TTTTACAAACCCACAAAAACCCACTAGCTGCTGAGGCTCCAACGAGACCAAGATGTGGACCGTGCCAGT
GTTGTTCTGGGTTTTGGGAGCGTTTGGTTCTGGGACTCTGCGCAGGGAGGGACTATAGGCGTGAATGAA
GATGATATTGTGACCCAGGTACAGGAGACGGCATGGTGCCTCCAGGTATAGAAGACAAAATAACAACCA
CAGGTGCTACTGGAGGGCTTAATGAATCTACTGGCAAGGCACCTCTGGTACCAACGCAGAGAGAGCGTGG
GACGAAGCCTCCCTTAGAGGAACTGTCCACCTCAGCAACCTCAGACCATGATCACAGAGAACACGAGAGT
ACAACCACTGTCAAAGTGGTACTAGCCACTCTGTGGACAAGAAAACAAGTCACCCCAATAGAGATAATG
CAGGGGATGAAACGCAGACAACAGATAAGAAAGATGGCTTGCCAGTAGTCACCCTGGTTGGAATCATAGT
TGGCGTCTTGTTAGCCATTGGCTTCGTCGGAGGGATCTTCATTGTTGTTATGAAGAAGATTTCTGGAAGG
TTCTCGCCCTAAAGAGCTAAACAGAACAGTTGTTCTCCAACACATCTGAAAATAGAGAGCTTCCAAC
TTGCCCTGTTCCCATCCTCTTCTGTGGAGGAAGATGACCCATGGCGTGCCACCCACCCACCCACACAG
CCATGGTGACCCCTCCGCTTGGCCAGCAGTACCAAGGAAAGATACAGGACAAGCCACAGCCCTCAAAG
CATCTGCCTTTGGAAAATAAATTTTTAACATAAATGTTATGATCGATGATTCAAAAGACAACATGCTTA
GAAAATGGAGCAAAGCCGAGACAGTATCGCCAGCTTTAGCAACTGTATCCATGGGTTACCCCTGGCCAGT
CCCTATTACTGTTAAGAGGCATAGAGTCTGGAAATGTTACATCACAGAGGCATGGATCCTTTTGCAGTTG
CCAACCTGTAACCTGCACTTGATACATACACATTCAGCCAGTCCGAAGCATCCACTGTGCCTTCAGTTC
CGGGGAGACACTGCTTTTTTTTTTTTTTTTACAAGTCTCCAACCATCTTAAGCCTCAAATGAGTTGCGA
AGCCACGTCCTCATCTCCCTAGGATAGGACTCAAGCCCTCAGATCAGCTGCATCTTTCTGGATAATAGAG
ACCTCATCCTAGATGCTGAGAACACTGTTGGATGTCACAAGATGCTAAAAGGCTCAGCCGCTGTAGAACC
AAGAACATTTTCAGTAGAAGTGACTCGTGTGGCTTTAGTATAGGAAGTCAGACCGACAGTTTCTAACAC
CCGCTTCTGCTTCTCAGGACAGACAGGAAAGCAAAAATAATCTTGTATAATCTTAACCTGCTTTTATGG
GGTGGATGTAAGGTTTGGCGTTAATAGAAGATATTTCCAGTCTTCGTGACACGGGGACTCAGTGTGCT
GGGACAGAGCTGTAGTCTTGGTCGTCTGTGTTGGTACGCAATACAGTGTAGACATCTTTCAAATAAA
ACCTGATTGTGTCCAAGAAAAAAAAAAAAAAAAAAAA



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Restriction Sites:	RsrII-NotI
ACCN:	NM_010329
Insert Size:	519 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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:	BC026551 , AAH26551
RefSeq Size:	1714 bp
RefSeq ORF:	519 bp
Locus ID:	14726
UniProt ID:	Q62011
Cytogenetics:	4 E1

Gene Summary:

Mediates effects on cell migration and adhesion through its different partners. During development plays a role in blood and lymphatic vessels separation by binding CLEC1B, triggering CLEC1B activation in platelets and leading to platelet activation and/or aggregation (PubMed:14522983, PubMed:15231832, PubMed:20110424, PubMed:17616532). Interaction with CD9, on the contrary, attenuates platelet aggregation and pulmonary metastasis induced by PDPN. Mediates effects on cell migration and adhesion through its different partners. Through MSN or EZR interaction promotes epithelial-mesenchymal transition (EMT) leading to ERZ phosphorylation and triggering RHOA activation leading to cell migration increase and invasiveness. Interaction with CD44 promotes directional cell migration in epithelial and tumor cells (By similarity). In lymph nodes (LNs), controls fibroblastic reticular cells (FRCs) adhesion to the extracellular matrix (ECM) and contraction of the actomyosin by maintaining ERM proteins (EZR; MSN and RDX) and MYL9 activation through association with unknown transmembrane proteins. Engagement of CLEC1B by PDPN promotes FRCs relaxation by blocking lateral membrane interactions leading to reduction of ERM proteins (EZR; MSN and RDX) and MYL9 activation (PubMed:25347465). Through binding with LGALS8 may participate to connection of the lymphatic endothelium to the surrounding extracellular matrix (By similarity). In keratinocytes, induces changes in cell morphology showing an elongated shape, numerous membrane protrusions, major reorganization of the actin cytoskeleton, increased motility and decreased cell adhesion (PubMed:10574709). Controls invadopodia stability and maturation leading to efficient degradation of the extracellular matrix (ECM) in tumor cells through modulation of RHOC activity in order to activate ROCK1/ROCK2 and LIMK1/LIMK2 and inactivation of CFL1 (By similarity). Required for normal lung cell proliferation and alveolus formation at birth (PubMed:12654292). Does not function as a water channel or as a regulator of aquaporin-type water channels (By similarity). Does not have any effect on folic acid or amino acid transport (PubMed:12032185).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.