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Product datasheet for MR211015

Pdcd6ip (NM_011052) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pdcd6ip (NM_011052) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pdcd6ip
Synonyms:	AI480591; Aip1; Alix; AW544830; C76364; Eig2; mKIAA1375
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR211015 representing NM_011052
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGTCGTTCATCTGGGTGCAGCTGAAGAAGACCTCGGAGGTGGACCTGGCCAAGCCGCTGGTGAAGT
TCATCCAGCAGACGTACCCGAGCGGCGGCGAGGAGCAGGCCCAGTACTGCCGTGCGGCCGAGGAGCTCAG
CAAACTGCGGCGCTCGGCGCTCGGTCGCCCGCTGGACAAGCATGAGGGCGCCCTGGAGACGTTGCTGAGG
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CCTACTATCCACAGCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211015 representing NM_011052
Red=Cloning site Green=Tags(s)

MASFIWVQLKKTSEVDLAKPLVKFIQQTYPSGGEEQAQYCRAAEELSKLRRSALGRPLDKHEGALETLLR
YYDQICSIEPKFPFSENQICLTFTWKDAFDKGSLFGGSVKLALASLGYEKSCVLFNCAALASQIAAEQNL
DNDEGLKTAAKQYQFASGAFLHIKDTVLSALSREPTVDISPDTVGTLSLIMLAQAQEVFFLKATRDKMKD
AIIAKLANQAADYFGDAFKQCQYKDTLPKEVFPTLAAKQCIMQANAEYHQSILAKQQKKFGEEIARLQHA
AELIKNVASRYDEYVNVKDFSDKINRALTAAKKDNDFIYHDRVPDLKDLDPIGKATLVKPTPVNVPVSQK
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STSVVEQGGIQTVDQLIKELPELLQRNREILEESLRLLDEEEATDNDLRAKFKDRWQRTPSNDLYKPLRA
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EIKKERESLENDLKSVNFDMTSKFLTALAQDGVITEEALSVTELDRIYGGLTSKVQESLKKQEGLLKNIQ
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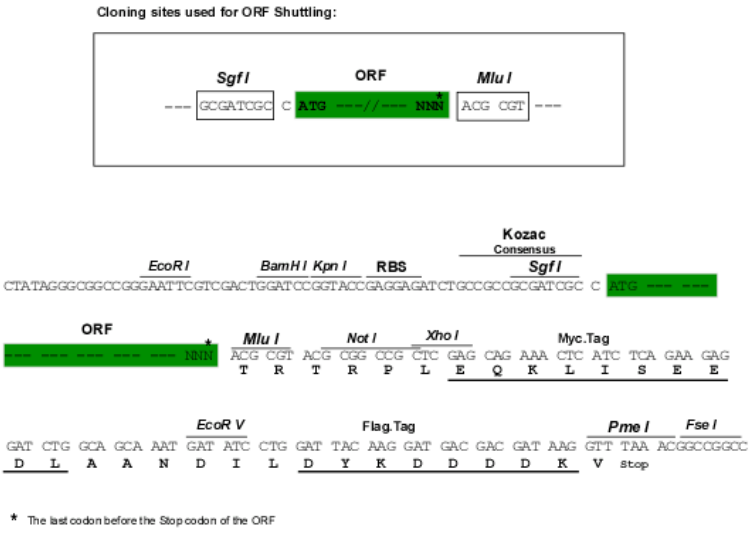
Restriction Sites: SgfI-MluI

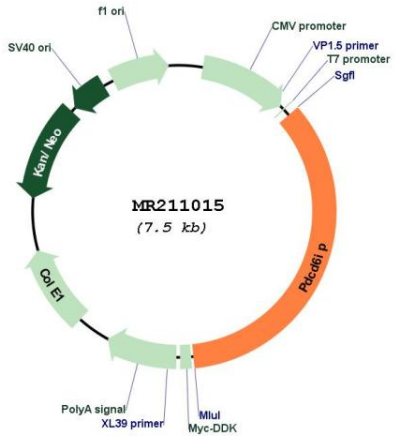
Cloning Scheme:



ACCN:	NM_011052
ORF Size:	2607 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_011052.1, NM_011052.2, NP_035182.1
RefSeq Size:	2610 bp
RefSeq ORF:	2610 bp
Locus ID:	18571
UniProt ID:	Q9WU78
Cytogenetics:	9 F3
MW:	96.5 kDa

Gene Summary: Multifunctional protein involved in endocytosis, multivesicular body biogenesis, membrane repair, cytokinesis, apoptosis and maintenance of tight junction integrity. Class E VPS protein involved in concentration and sorting of cargo proteins of the multivesicular body (MVB) for incorporation into intralumenal vesicles (ILVs) that are generated by invagination and scission from the limiting membrane of the endosome. Binds to the phospholipid lysobisphosphatidic acid (LBPA) which is abundant in MVBs internal membranes. The MVB pathway requires the sequential function of ESCRT-O, -I,-II and -III complexes. The ESCRT machinery also functions in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis. Adapter for a subset of ESCRT-III proteins, such as CHMP4, to function at distinct membranes. Required for completion of cytokinesis. May play a role in the regulation of both apoptosis and cell proliferation. Regulates exosome biogenesis in concert with SDC1/4 and SDCBP (By similarity). By interacting with F-actin, PARD3 and TJP1 secures the proper assembly and positioning of actomyosin-tight junction complex at the apical sides of adjacent epithelial cells that defines a spatial membrane domain essential for the maintenance of epithelial cell polarity and barrier (PubMed:27336173).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211015