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Product datasheet for RC218762

PACS2 (NM_001100913) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PACS2 (NM_001100913) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PACS2
Synonyms:	EIEE66; PACS-2; PACS1L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RC218762 representing NM_001100913
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGAGCGAGGCCGCCTCGGCCTCCCCGGCGCGCCCGGCGCGCTCAACACGCCCGTGCCCATGAACC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC218762 representing NM_001100913
Red=Cloning site Green=Tags(s)

MAERGRLGLPGAPGALNTPVPMNLFATWEVDGSSPSCVPRLCSLTLKKLVVFKELEKELISVVIAVKMQG
SKRILRSHEIVLPPSGQVETDLALTFSLQYPHFLKREGNKLQIMLQRRKRYKNRTILGYKTLAAGSISMA
EVMQHPSEGGQVLSLCSSIKEAPVKAAEIWIASLSSQPIDHEDSTMQAGPKAKSTDNYSEEEYESFSSEQ
EASDDAVQGQDLDEDDFDVGKPKKQRRSIVRTTSMTRQQNFKQKVVALLRRFKVSDEVLDSEQDPAEHIP
EAEEDLDLLYDTLDMEHPSDSGPDMEDDDSVLSTPKPKLRPYFEGLSHSSSQTEIGSIHSARSHKEPPSP
ADVPEKTRSLGGRQPSDSVSDTVALGVPGPREHPGQPEDSPEAEASTLDVFTERLPPSGRITKTESLVIP
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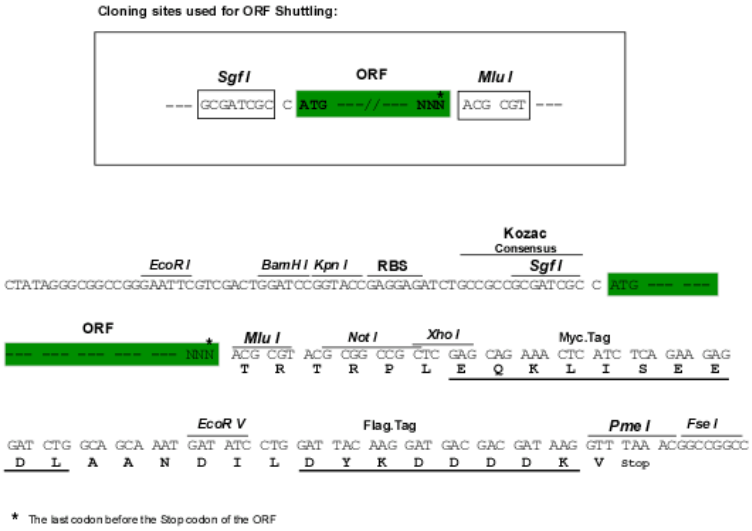
AAPSGSGTLSSTPPSASPAAKEASPTPPSSPSVSGGLSSPSQGVGAELMGLQVDYWTAAQPADRKRDAEK
KDLPVTKNTLKCTFRSLQVSRLPSSGEAAATPTMSMTVVTKEKNKKVMFLPKKAKDKDVESKSQCIEGIS
RLICTARQQQNMLRVLIDGVECSDVKFFQLAAQWSSHVKHFPICIFGHSKATF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8021_b03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001100913

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ORF Size:	2679 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001100913.1, NP_001094383.1
RefSeq Size:	6332 bp
RefSeq ORF:	2715 bp
Locus ID:	23241
UniProt ID:	Q86VP3
Cytogenetics:	14q32.33
MW:	98 kDa
Gene Summary:	Multifunctional sorting protein that controls the endoplasmic reticulum (ER)-mitochondria communication, including the apposition of mitochondria with the ER and ER homeostasis. In addition, in response to apoptotic inducer, translocates BIB to mitochondria, which initiates a sequence of events including the formation of mitochondrial truncated BID, the release of cytochrome c, the activation of caspase-3 thereby causing cell death. May also be involved in ion channel trafficking, directing acidic cluster-containing ion channels to distinct subcellular compartments.[UniProtKB/Swiss-Prot Function]

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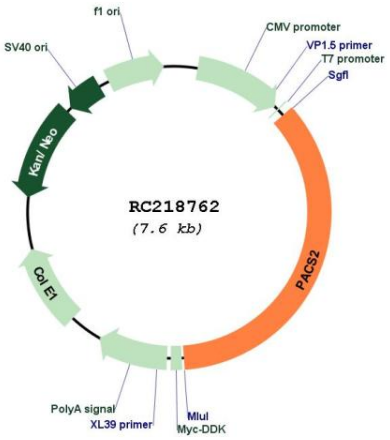
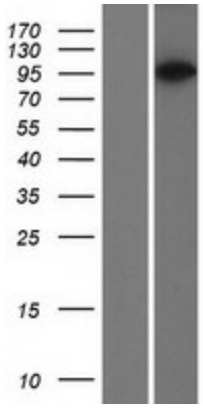
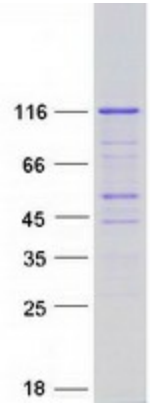
Product images:



Circular map for RC218762



Western blot validation of overexpression lysate (Cat# [LY420308]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218762 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PACS2 protein (Cat# [TP318762]). The protein was produced from HEK293T cells transfected with PACS2 cDNA clone (Cat# RC218762) using MegaTran 2.0 (Cat# [TT210002]).

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