

## Product datasheet for **RC209593**

### **PACS2 (NM\_015197) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PACS2 (NM_015197) 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:

>RC209593 representing NM\_015197  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCGAGCGAGGCCGCTCGGCCTCCCCGGCGCGCCGGCGCGCTCAACACGCCCGTGCCCATGAACC  
 TGTTCCGCACCTGGGAGGTGGACGGCTCCAGCCCAGCTGCGTGCCAGGTTGTGCAGCCTGACTCTGAA  
 GAAGCTGGTGGTCTTCAAGGAGCTGGAGAAGGAGCTGATCTCCGTGGTATCGCTGTCAAGATGCAGGGC  
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 TGACCTTCTCCTTGACGATCCTCACTTCTTGAAGAGGGAAGGCAACAAGCTTCAGATCATGCTGCAGCG  
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 GAGGTGATGCAACACCCGCTGAAGGTGGCCAGGTGCTGAGCCTCTGCAGCAGCATCAAGGAGGCCCCCG  
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 GAGGCCAGTGACGACGCCGTGCAGGGGCGAGGACTTGGACGAGGAGGACTTTGACGTGGGGAAAGCCGAAGA  
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 GCTGCTGCGGAGGTTCAAAGTGTCCGACGAGGTCTGGACTCGGAGCAGGACCCTGCGGAGCACATCCCC  
 GAGGCAGAGGAGGACCTGGACCTCCTGTATGACACCTGGACATGGAGCACCCGAGCAGCGGCCCG  
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 GCTGACGTGCCGAGAAGACGCGGTCCCTGGGAGGCAGGACCCGAGCGACAGTGTCTGACACGGTGG  
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 CCTGGATGTGTTACGGAGAGGCTGCCGCCAGCGGGAGGATCACCAAGACAGAGTCCCTTGTATCCCC  
 TCCACCAGGTCCGAGGGGAAGCAGGCTGGCCGACGGGGCCGAGCACATCCTTGAAGGAGCGGCAGGCAG  
 CACGGCCCCAGAATGAGCGGGCAACAGCCTGGACAACGAGCGCTGCCGGACGCCCGGAGCCAGCTACA  
 GATCCCCAGGAAGACTGTGTATGACCAGCTCAACCACATCCTCATCTCCGATGACCAGCTTCCCGAAAAC  
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 CCGTGGTGTGCACGTGCTCTCCTGCGGACGTCCAGGCGGCCTTCCAGCACCATCGTCTCACGGATACAGAG  
 TACTGCAACTGCAATTTCCAGCCCCGACCCCGTGAAGATCGCCGTGGCGGGAGCGCAGCATTACCTC  
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 TCTTGGTATCCCACTGGGCTCCACCCCGTGGCCAGGTACCTAGGCTCCGTGGACTACCGCTACAACAA  
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 CACCTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209593 representing NM\_015197  
 Red=Cloning site Green=Tags(s)

MAERGRGLPGAPGALNTPVPMNLFATWEVDGSSPSCVPRLCSLTKKL VVFKLEKELISVVIIVKMQG  
 SKRILRSHEIVLPPSQGVETDLALTFSLQYPHFLKREGNKLQIMLQRRKRYKNRTILGYKTLAAGSISMA  
 EVMQHPSEGGQVLSLCSIIKEAPVKAEEIWIASLSSQPIDHEDSTMQAGPKAKSTDNYSEEEYESFSSEQ  
 EASDDAVQGGDLDEDDFDVGGPKKQRRSIVRTTSMTRQQNFQKQVVALLRKFVSDVLDSEQDPAEHIP  
 EAEDLDLLYDTLDMHPSDSGPDMEDDSVLSTPKPKLRPYFEGLSHSSSQTEIGSIHSARSHKEPPSP  
 ADVPEKTRSLGGRQPSDSVSDTVVALGVPGPREHPGQPEDSPEAEASTLDVFTERLPPSGRITKTESLVIP  
 STRSEKQAGRRGRSTSLKERQAARPQNERANSLDNERC PDARSQIIPRKT VYDQLNHILISDDQLPEN  
 IILVNTSDWQQFLSDVLRHTLPVVCTCSPADVQAAFSTIVSRIQRYCNCNSQPPTPVKIAVAGA QHYL  
 SAILRFLVEQLSHKTPDWLGYMRFVIPLGSHPVARYLGSVDYRYNFFQDLAWRDLFNKLEAQS AVQDT  
 PDIVSRITQYIAGANCAHQLPIAEAMLTYKQKSPDEESSQKFIPIFVGVKVGIVEPSSATSGDSDDAAPS  
 GSGTSSPPSASPAAKEASPTPPSSPSVSGGLSSPSQVGAELMGLQVDYWTAAQPADRRDAEKKDL P  
 VTKNTLKCTFRSLQVSRLPSSGEEAATPTMSMTVVTKENKKVMFLPKKAKDKDVEKSKSQCEGISRLIC  
 TARQQNMLRVLIDGVECSVDKFFQLAAQWSSHVKHFPICFGHSKATF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

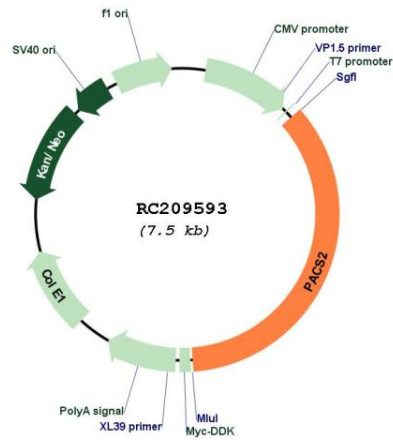
Cloning Scheme:



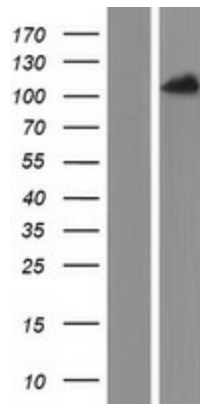
ACCN: NM\_015197

<b>ORF Size:</b>	2667 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	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>	<a href="#">NM_015197.4</a>
<b>RefSeq Size:</b>	6667 bp
<b>RefSeq ORF:</b>	2670 bp
<b>Locus ID:</b>	23241
<b>UniProt ID:</b>	<a href="#">Q86VP3</a>
<b>Cytogenetics:</b>	14q32.33
<b>MW:</b>	98.2 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for RC209593



Western blot validation of overexpression lysate (Cat# [LY414719]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209593 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).