

Product datasheet for **RC204041**

ERp72 (PDIA4) (NM_004911) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ERp72 (PDIA4) (NM_004911) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ERp72
Synonyms:	ERp-72; ERP70; ERP72
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC204041 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCCATGAGGCCCGGAAAGCCTTCTGCTCCTGCTCCTTGGGGCTGGTGCAGCTGCTGGCCGTGGCGGGTG
CCGAGGGCCCGGACGAGGATTCTTCTAACAGAGAAAATGCCATTGAGGATGAAGAGGAGGAGGAGGAGGA
AGATGATGATGAGGAAGAAGACGACTTGAAGTTAAGGAAGAAAATGGAGTCTTGGTCTAAATGATGCA
AACTTTGATAATTTGTGGCTGACAAAGACACAGTGTGCTGGAGTTTTATGCTCCATGGTGTGGACATT
GCAAGCAGTTTGTCCGGAATAGAAAAATGGCAACATATTAAGGATAAAGATCCTCCCATTCTGT
TGCCAAGATCGATGCAACCTCAGCGTCTGTGCTGGCCAGCAGTTTGTGTGAGTGGCTACCCACCATC
AAGATCCTTAAGAAGGGCAGGCTGTAGACTACGAGGGCTCCAGAACCCAGGAAGAAATGTTGCCAAGG
TCAGAGAAGTCTCCAGCCGACTGGACGCTCCACCAGAAGTCACGCTTGTGTTGACCAAAGAGAACTT
TGATGAAGTTGTGAATGATGCAGATATCATTCTGGTGGAGTTTTATGCCCATGGTGTGGACACTGCAAG
AACTTGGCCCGAGTATGAGAAGGCGCCAAGGAGCTCAGCAAGCGTTCTCTCCAATCCCCTGGCAA
AGGTGCGACGCCACCGAGAAACAGACCTGGCCAAGAGTTTGTGTCTCTGGCTATCCCACCCTGAAAAT
TTTCCGAAAGGAAGGCCTTATGACTACAACGGCCACGAGAAAAATATGGAATCGTTGATTACATGATC
GAGCAGTCCGGGCTCCCTCCAAGGAGATTCTGACCCTGAAGCAGGTCCAGGAGTTCTGAAGGATGGAG
ACGATGTCATCATCATCGGGTCTTTAAGGGGAGAGTGACCCAGCCTACCAGCAATACCAGGATGCCGC
TAAACCTGAGAGAAGATTACAAATTTACCACACTTTCAGCACAGAAATAGCAAAGTTCTTGAAGTC
TCCCAGGGCAGTTGGTTGTAATGCAGCCTGAGAAATCCAGTCCAAGTATGAGCCCGGAGCCACATGA
TGGACGTCCAGGGCTCCACCCAGGACTCGGCCATCAAGGACTTCGTGCTGAAGTACGCCCTGCCCTGGT
TGGCCACCGCAAGGTGTCAAACGATGCTAAGCGCTACACCAGGCGCCCTGGTGGTCTACTACAGT
GTGGACTTCAGCTTTGATTACAGAGCTGCAACTCAGTTTTGGCGGAGCAAAGTCTAGAGGTGGCCAAGG
ACTTCCCTGAGTACACCTTTGCCATTGCGGACGAAGAGGACTATGCTGGGGAGGTGAAGGACCTGGGGCT
CAGCGAGAGTGGGGAGGATGTCAATGCCGCCATCCTGGACGAGAGTGGGAAGAAGTTCGCCATGGAGCCA
GAGGAGTTTACTCTGACACCCTCCGCGAGTTTGTCACTGCTTTCAAAAAGGAAAAGTGAAGCCAGTCA
TCAAATCCAGCCAGTGCCTAAGAACAACAAGGGACCCGTCAAGGTCGTGGTGGAAAGACCTTTGACTC
CATTGTGATGGACCCCAAGAAGGACGTCCTCATCGAGTTCTACGCACCATGGTGGGGCACTGCAAGCAG
CTAGAGCCGTGTACAACAGCCTGGCCAAGAAGTACAAGGGCCAAAAGGGCCTGGTTCATGCCAAGATGG
ACGCCACTGCCAACGACGTCCCCAGCGACCGCTATAAGGTGGAGGGCTTCCCACCATCTACTTCGCCCC
CAGTGGGGACAAAAGAACCAGTTAAATTTGAGGGTGGAGACAGAGATCTGGAGCATTTGAGCAAGTTT
ATAGAAGAATGCCACAAAAGTGAAGGACCAAGGAAGAGCTTACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204041 protein sequence
Red=Cloning site Green=Tags(s)

MRPRKAFLLLLLLGLVQLLAVAGAEGPDEDSSNRENAIEDEEEEEEDDDEEEDDLEVKEENGLVLNDA
 NFDNFVADKDTVLLEFYAPWCGHCKQFAPEYEKIANILKDKDPPIPVAKIDATSASVLASRFDVSGYPTI
 KILKKGQAVDYEGRSQEEIVAKVREVSQPDWTPPEVTLVLTKENFDEVNDADIILVEFYAPWCGHCK
 KLAPEYEKAAKELSKRSPPIPLAKVDATAETDLAKRFDVSGYPTLKIIFRKGRPYDYNPREKYGIVDYMI
 EQSGPPSKEILTLKQVQEFKDGDDVIIIGVFKGESDPAYQQYQDAANLREDYKFHHTFSTEIAKFLKV
 SQGQLVVMQPEKFSKYEPESHMDVQGSTQDSAIDKDFVLKYALPLVGHKRVSNDAKRYTRRPLVVVYYS
 VDFSFDYRAATQFWRSKVLEVAKDFPEYTFIAIDEEDYAGEVKDLGLSESGEDVNAAILDESGKFAPEP
 EEFSDTLREFVTAFFKGLKPKVIKSPVKNKGPVKKVVGKTFDSIVMDPKDVLIEFYAPWCGHCKQ
 LEPVYNSLAKKYKQKGLVIAKMDATANDVPSDRYKVEGFPTIYFAPSGDKKNPVKFEKGGDRDLEHLSKF
 IEEHATKLSRTKEEL

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6154_f09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004911

ORF Size: 1935 bp

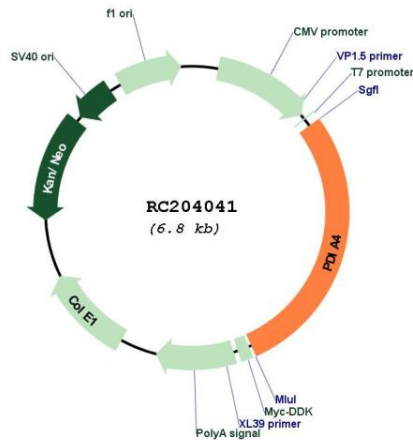
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

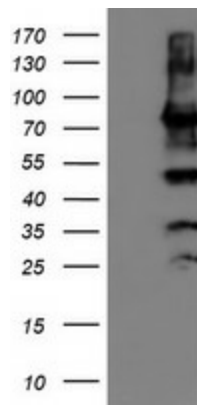
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_004911.2
RefSeq Size:	2970 bp
RefSeq ORF:	1938 bp
Locus ID:	9601
UniProt ID:	P13667
Cytogenetics:	7q36.1
Domains:	thioered
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Vibrio cholerae infection
MW:	72.9 kDa
Gene Summary:	This gene encodes a member of the disulfide isomerase (PDI) family of endoplasmic reticulum (ER) proteins that catalyze protein folding and thiol-disulfide interchange reactions. The encoded protein has an N-terminal ER-signal sequence, three catalytically active thioredoxin (TRX) domains, two TRX-like domains and a C-terminal ER-retention sequence. This protein, when bound to cyclophilin B, enhances the rate of immunoglobulin G intermolecular disulfide bonding and antibody assembly. [provided by RefSeq, Dec 2016]

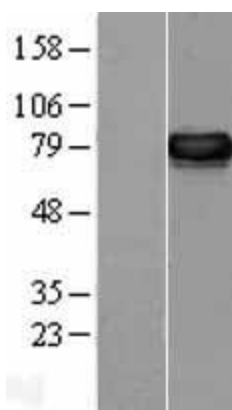
Product images:



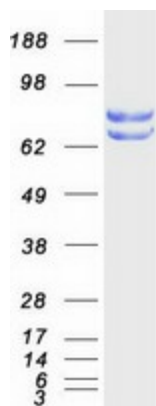
Circular map for RC204041



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PDIA4 (Cat# RC204041, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PDIA4 (Cat# [TA503882]). Positive lysates [LY401531] (100ug) and [LC401531] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401531]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204041 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PDIA4 protein (Cat# [TP304041]). The protein was produced from HEK293T cells transfected with PDIA4 cDNA clone (Cat# RC204041) using MegaTran 2.0 (Cat# [TT210002]).