

## Product datasheet for **RG204041**

### 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:	TurboGFP
Symbol:	ERp72
Synonyms:	ERp-72; ERP70; ERP72
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG204041 representing NM\_004911  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGGCCCGGAAAGCCTTCTGCTCCTGCTCCTTGGGGCTGGTGCAGCTGCTGGCCGTGGCGGGT  
 CCGAGGGCCCGGACGAGGATTCTTCTAACAGAGAAAATGCCATTGAGGATGAAGAGGAGGAGGAGGA  
 AGATGATGATGAGGAAGAAGACGACTTGAAGTTAAGGAAGAAAATGGAGTCTTGGTCTAAATGATGCA  
 AACTTTGATAATTTGTGGCTGACAAAGACACAGTGTCTGGAGTTTTATGCTCCATGGTGTGGACATT  
 GCAAGCAGTTTGTCCGGAATAGAAAAATGGCAACATATTAAGGATAAAGATCCTCCCATTCTGT  
 TGCCAAGATCGATGCAACCTCAGCGTCTGTCTGGCCAGCAGTTTGTGTGAGTGGCTACCCACCATC  
 AAGATCCTTAAGAAGGGCAGGCTGTAGACTACGAGGGCTCCAGAACCAGGAAGAAATGTTGCCAAGG  
 TCAGAGAAGTCTCCAGCCGACTGGACGCTCCACCAGAAGTCAGCTTGTGTTGACCAAAGAGAACTT  
 TGATGAAGTTGTGAATGATGCAGATATCATTCTGGTGGAGTTTTATGCCCATGGTGTGGACTGCAAG  
 AAATTGCCCGGAGTATGAGAAGGCGCAAGGAGCTCAGCAAGCGTTCTCTCCAATCCCCTGGCAA  
 AGGTGCAGCCACCGCAGAAACAGACCTGGCCAAGAGTTTGTGTCTCTGGCTATCCCACCCTGAAAAT  
 TTTCCGCAAAGGAAGGCCTTATGACTACAACGGCCACGAGAAAAATATGGAATCGTTGATTACATGATC  
 GAGCAGTCCGGGCTCCCTCCAAGGAGATTCTGACCCTGAAGCAGGTCCAGGAGTTCTGAAGGATGGAG  
 ACGATGTCATCATCATCGGGTCTTTAAGGGGAGAGTGACCCAGCCTACCAGCAATACCAGGATGCCGC  
 TAAACCTGAGAGAAGATTACAAATTTACCACACTTTCAGCACAGAAATAGCAAAGTTCTTGAAGTC  
 TCCAGGGCAGTTGGTTGTAATGCAGCCTGAGAAATCCAGTCCAAGTATGAGCCCCGGAGCCACATGA  
 TGGACGTCAGGGCTCCACCAGGACTCGGCCATCAAGGACTCGTGTGCTGAAGTACGCCCTGCCCTGGT  
 TGGCCACCGCAAGGTGTCAAACGATGCTAAGCGCTACACCAGGCGCCCTGGTGGTCTCTACTACAGT  
 GTGGACTTCAGCTTTGATTACAGAGCTGCAACTCAGTTTTGGCGAGCAAAGTCTAGAGGTGGCCAAGG  
 ACTTCCCTGAGTACACCTTTGCCATTGGCGACGAAGAGGACTATGCTGGGGAGGTGAAGGACCTGGGGCT  
 CAGCGAGAGTGGGGAGGATGTCAATGCCCCATCCTGGACGAGAGTGGGAAGAAGTTCGCCATGGAGCCA  
 GAGGAGTTTACTCTGACACCCTCCGCGAGTTTGTCACTGCTTTCAAAAAAGGAAAAGTGAAGCCAGTCA  
 TCAATCCCAGCCAGTCCCAAGAACAACAAGGGACCCGTCAGGTCGTGGTGGGAAAGACCTTTGACTC  
 CATTGTGATGGACCCCAAGAAGGACGTCCTCATCGAGTTCTACGCACCATGGTGGGGCACTGCAAGCAG  
 CTAGAGCCGTGTACAACAGCCTGGCCAAGAAGTACAAGGGCCAAAAGGGCTGGTCATGCCAAGATGG  
 ACGCCACTGCCAACGACGTCGCCAGCAGCGCTATAAGGTGGAGGGCTTCCCACCATCTACTTCGCCCC  
 CAGTGGGGACAAAAAGAACCCAGTTAAATTTGAGGGTGGAGACAGAGATCTGGAGCATTGAGCAAGTTT  
 ATAGAAGAATGCCACAAAAGTGGAGCAGGACCAAGGAAGAGCTT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG204041 representing NM\_004911  
 Red=Cloning site Green=Tags(s)

MRPRKAFLLLLLGLVQLLAVAGAEGPDEDSSNRENAIEDEEEEEEDDDEEEDDLEVKEENGVLVLNDA  
 NFDNFVADKDTVLEFYAPWCGHCKQFAPEYEKIANILKDKDPPIPVAKIDATSASVLAASRFVDSGYPTI  
 KILKKGQAVDYEGRSQEIVAKVREVSQPDWTPPEVTLVLTENFDEVVNDADIIIVFYAPWCGHCK  
 KLAPEYEKAAKELSKRSPIPLAKVDATAETDLAKRFDVSGYPTLKIFRKGPRPYDNGPREKYGIVDYMI  
 EQSGPPSKEILTLKQVQEFLLKDGDDVIIIGVFKGESDPAYQYQDAANLREYKFFHHTFSTEIAKFLKV  
 SQQLVVMQPEKFSQKYEPESHMDVQGSTQDSAIDKDFVLKYALPLVGHKRVSNDAKRYTRRPLVVVYYS  
 VDFSFYRAATQFWRKVLVAKDFPEYTFIAIDEEDYAGEVKDLGLSESGEDVNAAILDESCKKFAPEP  
 EEFSDTLREFVTAFFKGLKPKVKSQPVKNNKGPVKKVVGKTFDSIVMDPKKDVLEIFYAPWCGHCKQ  
 LEPVYNSLAKKYKQKGLVIAKMDATANDVPSDRYKVEGFPTIYFAPSGDKKNPVKFEGGDRDLEHLSKF  
 IEEHATKLSRTKEEL

**TRTRPLE** - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



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:

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\\_004911.2](#)

RefSeq Size: 2930 bp

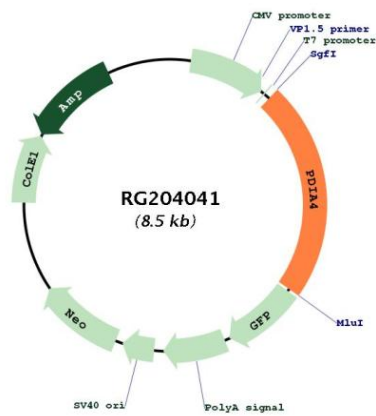
RefSeq ORF: 1938 bp

Locus ID: 9601

UniProt ID: [P13667](#)

**Cytogenetics:** 7q36.1  
**Domains:** thiored  
**Protein Families:** Druggable Genome, Transmembrane  
**Protein Pathways:** Vibrio cholerae infection  
**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 RG204041