

Product datasheet for **RC220453**

PDIR (PDIA5) (NM_006810) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDIR (PDIA5) (NM_006810) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDIR
Synonyms:	PDIR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC220453 representing NM_006810
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCGGGCCGGCCGGCGTGGCTGCTGCTGGCAATCTGGTGGTCTGCCATCATGGCTGTCCTCTG
 CAAAGGTCTCCTCGCTCATTGAGAGAATCTCTGACCCCAAGGACTTGAAAAACTGCTCAGAACCCGGAA
 TAATGTAAGTGGTCTTTACTCCAATCTGAGGTGGCAGCTGAAAAATCATCTCAGTTACTGTCCACAGTG
 GCCCAGCGGTGAAAGGACAAGGACCCTCTGCTGGTGGACTGTGGTATGCAGAGAGTAGAAAATTGT
 GCAAGAAGATGAAAGTTGACCTGAGCCCAAGGACAAAAAGTTGAATTATTCCATTACCAGGATGGTGC
 ATTTCACTACTGAATATAACCGAGCTGTGACATTTAAGTCCATAGTGGCCTTTTTGAAGGATCCAAAAGG
 CCCCCACTGTGGGAGGAAGATCCTGGAGCCAAAGATGTTGTCCACCTTGACAGTAAAAGGACTTCAGAC
 GGCTCCTGAAGAAGGAAGAGAAGCCGCTCTGATCATGTTTTATGCCCTGGTGCAGCATGTGCAAGAG
 GATGATGCCGATTTCCAGAAGGCTGCGACTCAGCTGCGAGGCCACGCCGTGCTGGCCGGATGAATGTC
 TACTCCTCTGAATTTGAAAACATCAAGGAGGAGTACAGCGTGCCGGCTTCCCCACCATCTGCTATTTTG
 AGAAAGGACGGTTCTTGTTCAGTATGACAACATATGGTCCACAGCTGAGGACATTGTGGAGTGGCTGAA
 GAATCCGACGCCCCACAGCCCCAGTCCCTGAGACTCCCTGGGCAGATGAGGGCGGCTCCGTTTATCAC
 CTGACCGATGAAGACTTTGACAGTTTGTGAAGGAACACTCCTCTGCTCCTCGTATGTTCCACGCCCAT
 GGTGTGGCCACTGTAAGAAAATGAAGCCGGAGTTTGAAGGCAGCAGAAGCCCTCCATGGAGAAGCGGA
 TAGCTCTGGTGTCTTGCAGCTGTCATGCCACTGTCAACAAGGCCCTGGCAGAAAGATTCCACATCTCA
 GAGTTTCTACGTTGAAGTATTTAAGAATGGAGAGAAATACGCAGTGCCTGTGCTCAGGACAAAAGAAG
 AGTTTCTCGAGTGGATGCAAAACCTGAGGCCCCCGCCCGCCAGAGCCACGTGGGAAGAGCAGCAGAC
 AAGCGTGTGACACTGGTGGGGACAACCTCCGGGAGACCCTGAAGAAGAAGAAACACACCTTGGTCATG
 TTCTACGCCCTTGGTGGCCACTGTAAGAAGTTCATCCGCACTTTACTGCTACTGCTGATGCCTTCA
 AAGATGACCGAAAGATTGCCTGTGCCGCTGTTGACTGTGTCAAAGACAAGAACCAAGACCTGTGCCAGCA
 GGAGGGCGTCAAGGGCTACCCACTTTCCACTACTACCACTATGGGAAGTTCGCAGAAAAGTATGACAGC
 GACCGCACAGAATTGGGATTTACCAATTATTCGAGCCCTCCGGGAGGGAGACCATGAAAGACTAGGGA
 AAAAGAAGGAAGATTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220453 representing NM_006810
 Red=Cloning site Green=Tags(s)

MARAGPAWLLLAIWVVLPSWLSSAKVSSLIERISDPKDLKLLRTRNNVLVLYSKSEVAENHLRLLSTV
 AQAVKGGTICWVDCGDAESRKLCKMKVDLSPKDKVELFHYQDGAFHTEYNRAVTFKSIVAFKDPKG
 PPLWEEDPGAKDVVHLDSEKDFRLLKKEEKPLLIMFYAPWCSMCKRMPHFQKAATQLRGHAVLAGMNV
 YSEFENIKEEYSVRGFPTICYFEKGRFLFYQDNYGSTAEDIVEWLKPNQPPQVPETPWADEGGSVYH
 LTDEDFDQFVKEHSSVLVMFHAPWCGHCKMKPEFEKAAEALHGEADSSGVLAAVDATVNKALAEERFHS
 EFPTLKYFKNGEKYAVPVLRTKKKFLWMMQNPPEAPPPEPTWEEQQTSLHLVGDNFRETLLKKKHTLVM
 FYAPWCPHCKKVIPHFTATADAFKDDRKIACAAVDCVKDKNQDLCQOEAVKGYPTFHYYHYGKFAEKYDS
 DRTELGFNYIRALREGDHERLGKKKEEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8116_b10.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_006810

ORF Size: 1557 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_006810.4](#)

RefSeq Size: 1873 bp

RefSeq ORF: 1560 bp

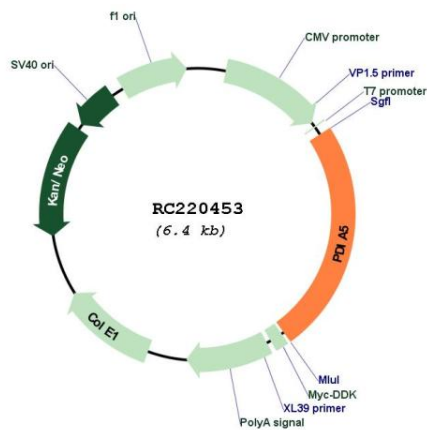
Locus ID: 10954

UniProt ID: [Q14554](#)

Cytogenetics: 3q21.1

Domains:	thioered
Protein Families:	Druggable Genome
MW:	59.6 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, a TRX-like domain, and a C-terminal ER-retention sequence. The N-terminal TRX-like domain is the primary binding site for the major ER chaperone calreticulin and possibly other proteins and substrates as well. Alternative splicing results in multiple protein- and non-protein-coding transcript variants. [provided by RefSeq, Dec 2016]

Product images:



Circular map for RC220453