

Product datasheet for **RC201710**

PDIA6 (NM_005742) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDIA6 (NM_005742) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDIA6
Synonyms:	ERP5; P5; TXNDC7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC201710 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCTCTCTGGTGCTCGGTCTGGTGAGCTGTACCTTCTTTCTGGCAGTGAATGGTCTGTATTCCTCTA
 TGATGATGTGATCGAATTAACCTCCATCGAATTTCAACCGAGAAGTTATTCAGAGTGATAGTTTGTGGCT
 TGTAGAATTCTATGCTCCATGGTGTGGTCACTGTCAAAGATTAACACCAGAATGGAAGAAAAGCAGCAACT
 GCATTAAGATGTTGTCAAAGTTGGTGCAGTTGATGCAGATAAGCATCATTCCCTAGGAGGTCACTATG
 GTGTTCAAGGATTTCTACCATTAAAGATTTTGGATCCAACAAAAACAGACCAGAAGATTACCAAGGTGG
 CAGAACTGGTGAAGCCATTGTAGATGCTGCGCTGAGTGTCTGCGCCAGCTCGTGAAGGATCGCCTCGGG
 GGACGGAGCGGAGGATACAGTTCTGAAAACAAGGCAGAAGTGATAGTTCAAGTAAGAAGGATGTGATTG
 AGCTGACAGACGACAGCTTTGATAAGAATGTTCTGGACAGTGAAGATGTTTGGATGGTTGAGTTCTATGC
 TCCTTGGTGTGGACACTGCAAAAACCTAGAGCCAGAGTGGCTGCCGAGCTTCAGAAGTAAAAGAGCAG
 ACGAAAGGAAAAGTGAAGTGGCAGCTGTGGATGCTACAGTCAATCAGGTTCTGGCTCCCGATACGGGA
 TTAGAGGATTTCTACAATCAAGATATTTAGAAAGGCGAGTCTCCTGTGGATTATGACGGTGGCGGGAC
 AAGATCCGACATCGTGTCCCGGGCCCTTGATTTGTTTTCTGATAACGCCACCTCTGAGCTGCTTGAG
 ATTATCAACGAGGACATTGCCAAGAGGACGTGTGAGGAGCACCAGCTCTGTGTTGTGGCTGTGCTGCCCC
 ATATCCTTGATACTGGAGCTGCAGGCAGAAATCTTATCTGGAAGTCTTCTGAAGTTGGCAGACAAATA
 CAAAAAGAAAATGTGGGGTGGCTGTGGACAGAAGCTGGAGCCAGTCTGAAGTTGAGACCGCTGGGG
 ATTTGGAGGTTTGGGTACCCCGCCATGGCCGCATCAATGCACGCAAGATGAAATTTGCTCTGCTAAAAG
 GCTCCTTCAGTGAGCAAGGCATCAACGAGTTTCTCAGGGAGCTCTTTTTGGGCTGGCTCCACGGCACC
 TGTAGGAGCGGGGCTTTCCCTACCATCGTTGAGAGAGAGCCTTGGGACGGCAGGATGGCGAGCTTCCC
 GTGGAGGATGACATTGACCTCAGTGATGTGGAGCTTGATGACTTAGGAAAGATGAGTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201710 protein sequence
 Red=Cloning site Green=Tags(s)

MALLVLGLVSCFFFLAVNGLYSSDDVIELTPSNFNREVIQSDSLWLVFYPWCGHCQRLTPWEKKAAT
 ALKDVKVVGAVDADKHSLGGQYGVQGFPTIKIFGSNKNRPEDYGGRTGEAIVDAAL SALRQLVKDRLG
 GRSGGYSSGKQGRSDSSSKKDVIELTDDSFKNVLDSEVWVVEFYAPWCGHCKNLEPEWAAAASEVKEQ
 TKGKVKLAAVDATVNQVLASRYGIRGFPTIKIFQKGESPVVDYDGGRTSDIVSRALDLFSDNAPPELLE
 IINEDIAKRTCEEHQLCVAVLPHILDGAAGRNSYLEVLLKLADKYKKMMWGLWTEAGAQSELETALG
 IGGFGYPAMAAINARKMKFALLKGSFSEQGINEFLRELSFGRGSTAPVGGGAFPTIVEREPWDGRDGELP
 VEDDIDLSDVELDDLKDEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6073_a11.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_005742

ORF Size: 1320 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

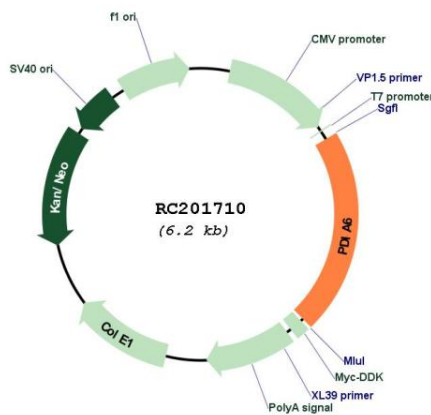
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

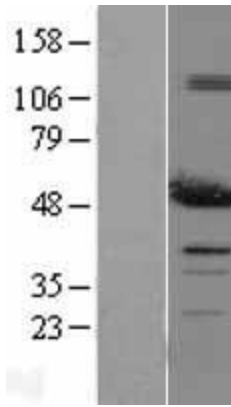
- Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid 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_005742.4
RefSeq Size:	2349 bp
RefSeq ORF:	1323 bp
Locus ID:	10130
UniProt ID:	Q15084
Cytogenetics:	2p25.1
Domains:	thioered
Protein Families:	Druggable Genome
MW:	48.1 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, two catalytically active thioredoxin (TRX) domains, a TRX-like domain, and a C-terminal ER-retention sequence. This protein inhibits the aggregation of misfolded proteins and exhibits both isomerase and chaperone activity. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2016]

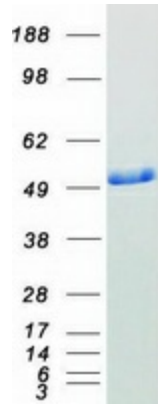
Product images:



Circular map for RC201710



Western blot validation of overexpression lysate (Cat# [LY401760]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201710 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PDIA6 protein (Cat# [TP301710]). The protein was produced from HEK293T cells transfected with PDIA6 cDNA clone (Cat# RC201710) using MegaTran 2.0 (Cat# [TT210002]).