

## Product datasheet for **RC238517**

### PDIA6 (NM\_001282705) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PDIA6 (NM_001282705) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDIA6
Synonyms:	ERP5; P5; TXNDC7
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>RC238517 representing NM\_001282705  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAGGATAATCACAGCCCTGCCTCCAAGTGTCCCAGGATCAAATGAGTTGATGATACTTGCACGGC  
 GCTCGGATCGTGGCTCACCAACTTCTCCTGCCACTCCCTATCAAGGAAAAGTCCCATATGTATCCATC  
 AACCCACATGGCTAATGCACCCGGTCTGGTGAGCTGTACCTTCTTTCTGGCAGTGAATGGTCTGTATTCC  
 TCTAGTGATGATGTGATCGAATTAACCCATCGAATTTCAACCGAGAAGTTATTCAGAGTGATAGTTGT  
 GGCTTGTAGAATTCTATGCTCCATGGTGTGGTCACTGTCAAAGATTAACACCAGAATGGAAGAAAGCAGC  
 AACTGCATTAAGATGTTGTCAAAGTTGGTGCAGTTGATGCAGATAAGCATCATTCCCTAGGAGGTCAG  
 TATGGTGTTCAGGGATTTCTACCATTAAGATTTTGGATCCAACAAAAACAGACCAGAAGATTACCAAG  
 GTGGCAGAACTGGTGAAGCCATTGTAGATGCTGCGCTGAGTGTCTGCGCCAGCTCGTGAAGGATCGCT  
 CGGGGACGGAGCGGAGGATACAGTTCTGGAAAACAAGGCAGAAGTGATAGTTCAAGTAAGAAGGATGTG  
 ATTGAGCTGACAGACGACAGCTTTGATAAGAATGTTCTGGACAGTGAAGATGTTTGGATGGTTGAGTTCT  
 ATGCTCCTTGGTGTGGACTGCAAAAACCTAGAGCCAGAGTGGGCTGCCGACGCTTCAGAAGTAAAAGA  
 GCAGACGAAAGGAAAAGTAAAAGTGGCAGCTGTGGATGCTACAGTCAATCAGGTTCTGGCCTCCCGATAC  
 GGGATTAGAGGATTTCTACAATCAAGATATTTCAAGAAAGGCGAGTCTCCTGTGGATTATGACGGTGGGC  
 GGACAAGATCCGACATCGTGTCCCGGCCCTTGATTTGTTTTCTGATAACGCCCCACCTCCTGAGCTGCT  
 TGAGATTATCAACGAGGACATTGCCAAGAGGACGTGTGAGGAGCACCAGCTCTGTGTTGTGGCTGTGCTG  
 CCCCATATCCTTGATACTGGAGCTGCAGCAGAAAATTCTATCTGGAAGTTCTTGAAGTTGGCAGACA  
 AATACAAAAAGAAAATGTGGGGTGGCTGTGGACAGAAGCTGGAGCCAGTCTGAACTTGAGACCGGCTT  
 GGGGATTGGAGGTTTGGGTACCCCGCCATGGCCGCCATCAATGCACGCAAGATGAAATTTGCTCTGCTA  
 AAAGGCTCCTTCACTGAGCAAGGCATCAACGATTTCTCAGGGAGCTCTCTTTGGGCGTGGCTCCACGG  
 CACCTGTAGGAGGCGGGCTTTCCCTACCATCGTTGAGAGAGAGCCTTGGGACGGCAGGGATGGCGAGCT  
 TCCCGTGGAGGATGACATTGACCTCAGTGTGGAGCTTGTGACTTAGGGAAAGATGAGTTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238517 representing NM\_001282705  
 Red=Cloning site Green=Tags(s)

MRIITAPASKVSRGSNELMILARRSDRGSPTSPAHSLSRKSPIMYPSTTMANAPGLVSCFFLAVNGLYS  
 SSDDVIELTPSNFNREVIQSDSLWLVEFYAPWCGHCQRLTPEWKAATALKDVVKVGAVDADKHHSLLGGQ  
 YGVQGFPTIKIFGSNKNRPEDYQGGRTGEAIVDAAL SALRQLVKDRLGGRSGGYSSGKQGRSDSSSKKDV  
 IELTDDSFDKNVLDSEVMMVEFYAPWCGHCCKNLEPEWAAAASEVKEQTKGKVKLAAVDATVNVQLASRY  
 GIRGFPTIKIFQKGE SPVDYDGGRTSRDIVSRALDLFSDNAPPELLEIINEDIKRTCEEHQLCVVAVL  
 PHILDTGAAGRNSYLEVLLKLADKYKKMVGWLWTEAGAQSELETALGIGFGYPAMAAINARKMKFALL  
 KGSFSEQGINEFLRELSFGRGSTAPVGGGAFPTIVEREPWDGRDGELPVEDDIDLSDVELDDLKDEL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

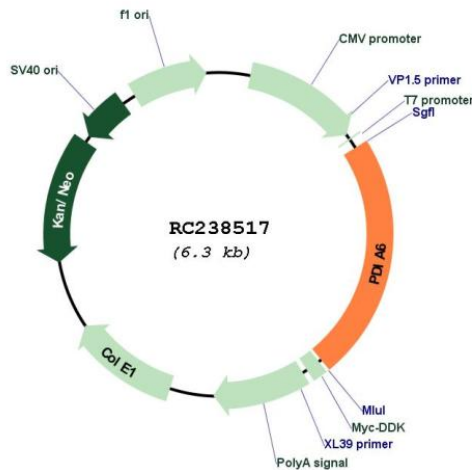
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_001282705

**ORF Size:**

1464 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\\_001282705.2](#)

**RefSeq Size:** 2722 bp

**RefSeq ORF:** 1467 bp

**Locus ID:** 10130

**UniProt ID:** [Q15084](#)

**Cytogenetics:** 2p25.1

**Protein Families:** Druggable Genome

**MW:** 53.7 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]