

Product datasheet for **RG238517**

PDIA6 (NM_001282705) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDIA6 (NM_001282705) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDIA6
Synonyms:	ERP5; P5; TXNDC7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG238517 representing NM_001282705.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGAGGATAATCACAGCCCCTGCCTCAAAGTGTCCCAGGATCAAATGAGTTGATGATACTTGCACGG
CGCTCGGATCGTGGCTCACCAACTTCTCCTGCCACTCCCTATCAAGGAAAAGTCCATAATGTATCCA
TCAACCCATGGCTAATGCACCCGGTCTGGTGAGCTGTACCTTCTTCTGGCAGTGAATGGTCTGTAT
TCCTCTAGTGATGATGTGATCGAATTAACCTCCATCGAATTTCAACCGAGAAGTTATTAGAGTGATAGT
TTGTGGCTTGTAGAATTCTATGCTCCATGGTGTGGTCACTGTCAAAGATTAACACCAGAATGGAAGAAA
GCAGCAACTGCATTAAGATGTTGTCAAAGTTGGTGCAGTTGATGCAGATAAGCATCATTCCCTAGGA
GGTCAGTATGGTGTTCAGGGATTTCTACCATTAAAGATTTTGGATCCAACAAAAACAGACCAGAAGAT
TACCAAGTGGCAGAAGTGGTGAAGCCATTGTAGATGCTGCGCTGAGTGTCTGCGCCAGCTCGTGAAG
GATCGCCTCGGGGACGGAGCGGAGGATACAGTTCTGAAAACAAGGCAGAAGTGAAGTCAAGTAAG
AAGGATGTGATTGAGCTGACAGACGACAGCTTTGATAAGAAATGTTCTGGACAGTGAAGATGTTTGGATG
GTTGAGTTCTATGCTCCTTGGTGTGGACTGCAAAAACCTAGAGCCAGAGTGGGCTGCCGAGCTTCA
GAAGTAAAAGAGCAGACGAAAGGAAAAGTAACTGGCAGCTGTGGATGCTACAGTCAATCAGGTTCTG
GCCTCCGATACGGGATTAGAGGATTTCTACAATCAAGATATTTAGAAAAGGCGAGTCTCCTGTGGAT
TATGACGGTGGGCGGACAAGATCCGACATCGTGTCCCGGGCCCTTGATTTGTTTTCTGATAACGCCCA
CCTCTGAGCTGCTTGAGATTATCAACGAGGACATTGCCAAGAGGACGTGTGAGGAGCACCAGCTCTGT
GTTGTGGCTGTCTGCCCATATCCTTGATACTGGAGTGCAGGCAGAAATCTTATCTGGAAGTTCTT
CTGAAGTTGGCAGACAAATACAAAAGAAAATGTGGGGTGGCTGTGGACAGAAGCTGGAGCCAGTCT
GAACTTGAGACCGCTTGGGGATTGGAGGTTTGGTACCCCGCCATGGCCGCAATCAATGCACGCAAG
ATGAAATTTGCTCTGCTAAAAGGCTCCTTCAGTGAGCAAGCATCAACGAGTTTCTCAGGGAGCTCTCT
TTTGGGCGTGGCTCCACGGCACCTGTAGGAGGCGGGCTTTCCCTACCATCGTTGAGAGAGCCTTGG
GACGGCAGGGATGGCAGCTTCCCGTGGAGGATGACATTGACCTCAGTGTGAGGCTTGTGACTTA
GGGAAAGATGAGTTG
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTAAAC
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Protein Sequence:

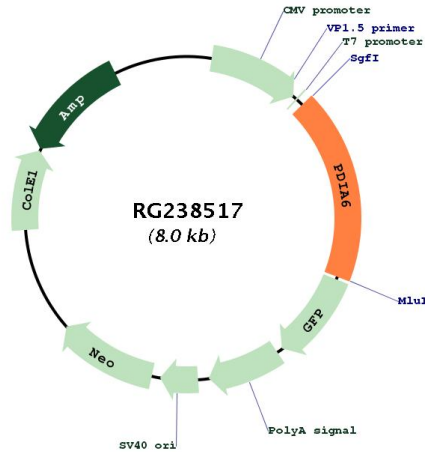
>Peptide sequence encoded by RG238517
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MRIITAPASKVSRGSNELMILARRSDRGSPTSPAHSLSRKSPIMYPSTTMANAPGLVSCFFLAVNGLY
SSSDDVIELTPSNFNREVIQSDSLWLEFVYAPWCGHCQRLTPEWKAATALKDVKVVGAVDADKHHSLG
GQYGVQGFPTIKIFGSKNRPEDYQGGRTGEAIVDAAL SALRQL VKDRLGGRSGGYSSGKQGRSDSSK
KDVIELTDDSFKNVLDSEVVMVEFYAPWCGHCKNLEPEWAAAASEVKEQTKGKVKLAAVDATVNQVL
ASRYGIRGFPTIKIFQKGESPVVDYDGGRTSRSDIVSRALDLFSDNAPPELLEIINEDIAKRTCEEHQLC
VVAVLPHILDGTGAAGRNSYLEVLLKLDKYKMKMWGLWTEAGAQSELETALGIGGFYPAMAAINARK
MKFALLKGSFSEQGINEFLRELSFGRGSTAPVGGGAFPTIVEREPWDGRDGPVEDDIDLSDVELDDL
GKDEL
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
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Restriction Sites:

Sgfl-MluI

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).

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]