

Product datasheet for **SC107263**

PLD6 (NM_178836) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLD6 (NM_178836) Human Untagged Clone
Tag:	Tag Free
Symbol:	PLD6
Synonyms:	ZUC
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_178836, the custom clone sequence may differ by one or more nucleotides

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ATGGGACGGTTGAGTTGGCAGGTGGCGGCCGCGCGGCTGTGGCCTGGCTCTGACTCTGGAGGCGCTGC
CTTGGGTGCTGCGCTGGCTGCGGTCCAGGCGCGCGGCCGCGCGGAGGCGCTGTTCTTCCCCTCTCA
GGTGACCTGTACCGAGGCCCTGCTGCGGGCTCCGGGCGCGGAGCTGGCCGAGCTCCCGAGGGCTGCCCC
TGCGGCCGCCCCACGGCGAGAGCGCGCTAAGCCGCTGCTGCGTGCCCTGCTGGCCGCCCGCCAGCC
TGGATCTCTGCCTGTTTCGCTTCTCCAGCCCGAGCTGGCCGCGCCGTGCAGTTGCTGCACCAGCGTGG
GGTGCGAGTGCGGGTCGTCACCGACTGCGACTACATGGCCCTCAACGGCTCGAAATCGGTCTGCTGCGC
AAGGCAGGGATCCAGGTCGGCACGATCAAGACCCAGGCTACATGCATCACAAGTTTGCCATCGTGGACA
AGAGGGTCTCATCACTGGCTCGCTCAACTGGACCACGAAGCCATCCAGAAACAAGGGAGAATGTTCT
CATCACGGAGGACGACGAGTACGTGCGGCTTTTCTGGAAGAATTTGAGCGCATCTGGGAACAGTTTAA
CCTACAAAGTATACCTTTTTCCACCAAAGAAAAGTCACGGAAGCTGTGCCCCACCTGTCTCCAGAGCTG
GAGGGAGATTGCTTTCATGGCACAGAAGTTCGCGCACCTCCAGCGAAAGCCAAACCTAA
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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_178836 unedited ATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGGTCCCGGATT AGCGGCGGCATGGGACGGTTGAGTTGGCAGGTGGCGGCCGCGCGGCTGTGGCCTGGCT CTGACTCTGGAGGCGCTGCCTTGGGTGCTGCGTGGCTGCGGTCCAGGCGGCGCGGCCG CGGCGGAGGCGCTGTTCTTCCCGTCTCAGGTGACCTGTACCGAGGCCCTGCTGCGGGT CCGGGCGCGGAGCTGGCCGAGCTCCCGAGGGCTGCCCGTGGCCGCGCCAGCCTGGATCTCTGC AGCGCGCTAAGCCGCTGCTGCGTGCCTGCTGGCCGCGCCGCGCCAGCCTGGATCTCTGC CTGTTTCGCCTTCTCCAGCCCGCAGCTGGGCCGCGCCGTGCAATTGCTGCACCCAGCGTGG GTGCGAGTGCGGGTTCGTACCGACTGCGACTACATGGCCCTCAACGGCTCGCAAATCGGT CTGCTGCGCAAGGCAGGGATCCAGGTCCGGCACGATCAAGACCCAGGCTACATGCATCAC AAGTTTGGCATCGTGGACAAGAGGGTGCTCATCACTGGCTCGCTCAACTGGACCACGCAA GCCATCCAGAACAACAGGGAGAATGTTCTCATCAGGAGGACGACGAGTACGTGCGGCTT TTTCTGGAAGAATTTGAGCGCATCTGGGAACAGTTTAACCCTACAAAGTATACCTTTTTTC CCACAAAGAAAAGTACGGAAGCTGTGCCCCACCTGTCTCCAGAGCTGGAGGGAGATTG CTNTCATGGCACAGAACTGCGGCACCTCCAGCGAAAGCCANACCTAACCAAGAATGGNN GGCTGAGCCCTNCCCTGCGGNCTGCTGN
Restriction Sites:	NotI-NotI
ACCN:	NM_178836
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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_178836.2 , NP_849158.1
RefSeq Size:	2577 bp
RefSeq ORF:	759 bp
Locus ID:	201164
UniProt ID:	Q8N2A8
Cytogenetics:	17p11.2
Protein Families:	Transmembrane

Gene Summary:

Endonuclease that plays a critical role in PIWI-interacting RNA (piRNA) biogenesis during spermatogenesis. piRNAs provide essential protection against the activity of mobile genetic elements (By similarity). piRNA-mediated transposon silencing is thus critical for maintaining genome stability, in particular in germline cells when transposons are mobilized as a consequence of wide-spread genomic demethylation (By similarity). Has been proposed to act as a cardiolipin hydrolase to generate phosphatidic acid at mitochondrial surface (By similarity). Although it cannot be excluded that it can act as a phospholipase in some circumstances, it should be noted that cardiolipin hydrolase activity is either undetectable in vitro, or very low (PubMed:21397848). In addition, cardiolipin is almost exclusively found on the inner mitochondrial membrane, while PLD6 localizes to the outer mitochondrial membrane, facing the cytosol (PubMed:21397848). Has been shown to be a backbone-non-specific, single strand-specific nuclease, cleaving either RNA or DNA substrates with similar affinity. Produces 5' phosphate and 3' hydroxyl termini, suggesting it could directly participate in the processing of primary piRNA transcripts (By similarity). Also acts as a regulator of mitochondrial shape through facilitating mitochondrial fusion (PubMed:17028579, PubMed:26711011).[UniProtKB/Swiss-Prot Function]