

Product datasheet for **SC327342**

Phospholipase C epsilon 1 (PLCE1) (NM_001165979) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phospholipase C epsilon 1 (PLCE1) (NM_001165979) Human Untagged Clone
Tag:	Tag Free
Symbol:	PLCE1
Synonyms:	NPHS3; PLCE; PPLC
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001165979, the custom clone sequence may differ by one or more nucleotides

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ATGGTTTCAGAAGGAAGTGCAGCAGGAAGAGACTTTGCAGGAATGGAAGAGGTGAGGCAG
CTCCACGTGAGATTCTGCAAAGGGATTAAGATTTGGCACCAGGCTTGGTTTCTGTGCAGC
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GTGGGTGGCTTGTCTCCAGTGACACAATGGATTACCGACAG
    
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- Restriction Sites:** Please inquire
- ACCN:** NM_001165979
- 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_001165979.1](#), [NP_001159451.1](#)
- RefSeq Size:** 6456 bp
- RefSeq ORF:** 5985 bp

Locus ID:	51196
UniProt ID:	Q9P212
Cytogenetics:	10q23.33
Protein Families:	Druggable Genome
Protein Pathways:	Calcium signaling pathway, Inositol phosphate metabolism, Metabolic pathways, Phosphatidylinositol signaling system
Gene Summary:	<p>This gene encodes a phospholipase enzyme that catalyzes the hydrolysis of phosphatidylinositol-4,5-bisphosphate to generate two second messengers: inositol 1,4,5-triphosphate (IP3) and diacylglycerol (DAG). These second messengers subsequently regulate various processes affecting cell growth, differentiation, and gene expression. This enzyme is regulated by small monomeric GTPases of the Ras and Rho families and by heterotrimeric G proteins. In addition to its phospholipase C catalytic activity, this enzyme has an N-terminal domain with guanine nucleotide exchange (GEF) activity. Mutations in this gene cause early-onset nephrotic syndrome; characterized by proteinuria, edema, and diffuse mesangial sclerosis or focal and segmental glomerulosclerosis. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Sep 2009]</p> <p>Transcript Variant: This variant (2) lacks two exons and has an additional novel exon at its 5' end, compared to variant 1. These differences produce a unique 5' UTR and cause translation initiation at a novel start codon, compared to variant 1. The encoded protein (isoform 2; also known as PLCepsilon1b) has a shorter and distinct N-terminus, compared to isoform 1.</p>