

## Recombinant Human PLCZ1 protein, His/sumo-tagged

**Cat. No.** PLCZ1-137H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Human PLCZ1(1-415aa) fused with His/sumotag at N-terminal was expressed in E. coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>ProteinLength</b>    | 1-415aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Description</b>      | <p>The protein encoded by this gene is a member of the phosphoinositide-specific phospholipase C family. Members in this family, classified into six isotypes that are tissue- and organ-specific, hydrolyze phosphatidylinositol 4,5-bisphosphate just before the phosphate group to yield diacylglycerol and inositol 1,4,5-trisphosphate. This protein localizes to the acrosome in spermatozoa and elicits Ca(2+) oscillations and egg activation during fertilization that leads to early embryonic development. Alternative splicing results in multiple transcript variants.</p> |
| <b>Form</b>             | Tris-based buffer,50% glycerol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>AA Sequence</b>      | <p>MEMRWFLSKIQDDFRGGKINLEKTQRLLEKLDIRCSYIHVKQIFKTS DYPVVLSENH<br/> CSTAQQEVMADNLQATF GESLLSDMLDDFPDTLP SPEALKFKILVKNKKIGTLKETH<br/> ERKGSDKRGDNQDKETGVKKLP GVMLFKKKKTRKL KIALALSDLVIYTKAEKFKSFQ<br/> HSRLYQQFNENNSIGETQARKLSKLRVHEFIFHTRKFITRIYPKATRADSSNF NPQEF<br/> WNIGCQMVALNFQTPGLPMDLQNGKFLDNGGSGYILKPHFLRESKSYFNPSNIKEG<br/> MPITLTIRLISGIQ LPLTHSSSNKGDSLVIIEVFGVPNDQMKQQTRVIKKNAFSPRWNE</p>                                                                                                                                                                                    |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

TFTFIIHVPELALIRFVVEGQGLIAGNEFL GQYTLPLLCMNKGYRRIPLFSRMGESLEP  
ASLFVYVWYVR

**Purity** >90% ( SDS-PAGE )

**Notes** Repeated freezing and thawing is not recommended. Store working aliquots at 4 centigrade for up to one week.

**Storage** Store at -20 centigrade, for extended storage, conserve at -20 centigrade or -80 centigrade.

## GENE INFORMATION

**Gene Name** [PLCZ1 phospholipase C, zeta 1 \[ Homo sapiens \]](#)

**Official Symbol** [PLCZ1](#)

**Synonyms** PLCZ1; phospholipase C, zeta 1; 1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase zeta-1; NYD SP27; PLCzeta; PLC-zeta-1; phospholipase C-zeta-1; PI-phospholipase C zeta 1; testis-development protein NYD-SP27; testis-development related NYD-SP27; phosphoinositide phospholipase C-zeta-1; 1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase zeta-1; NYD-SP27; MGC149685;

**Gene ID** [89869](#)

**mRNA Refseq** [NM\\_033123](#)

**Protein Refseq** [NP\\_149114](#)

**MIM** [608075](#)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UniProt ID</b>          | Q86YW0                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Chromosome Location</b> | 12p13.31                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Pathway</b>             | Calcium signaling pathway, organism-specific biosystem; Calcium signaling pathway, conserved biosystem; D-myo-inositol (1,4,5)-trisphosphate biosynthesis, organism-specific biosystem; D-myo-inositol-5-phosphate metabolism, organism-specific biosystem; Inositol phosphate metabolism, organism-specific biosystem; Inositol phosphate metabolism, conserved biosystem; Inositol phosphate metabolism, PI=> |
| <b>Function</b>            | calcium ion binding; hydrolase activity; phosphatidylinositol phospholipase C activity; signal transducer activity;                                                                                                                                                                                                                                                                                             |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA