

Recombinant Human PLCZ1 protein, His/sumo-tagged

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

SPECIFICATION

Product Overview	Recombinant Human PLCZ1(1-415aa) fused with His/sumotag at N-terminal was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	1-415aa
Description	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.
Form	Tris-based buffer,50% glycerol
AA Sequence	MEMRWFLSKIQDDFRGGKINLEKTQRLLEKLDIRCSYIHVKQIFKTSYDYPVVLLENH CSTAQQEVMADNLQATF GESLLSDMLDDFPDTLPSPALKFKILVKNKKIGTLKETH ERKGSDKRGDNQDKETGVKKLPGVMLFKKKKTRKL KIALALSDLVIYTKAEKFSFQ HSRLYQQFNENNSIGETQARKLSKLRVHEFIFHTRKFITRIYPKATRADSSNF NPQEF WNIGCQMVALNFQTPGLPMDLQNGKFLDNGGSGYILKPHFLRESKSYFNPSNIKEG MPITLTIRLISGIQ LPLTHSSSNKGDSLVIIEVFGVPNDQMKQQTRVIKKNAFSPRWNE

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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](#)

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UniProt ID	Q86YW0
Chromosome Location	12p13.31
Pathway	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=>
Function	calcium ion binding; hydrolase activity; phosphatidylinositol phospholipase C activity; signal transducer activity;