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Product datasheet for RC216391

Phospholipase C gamma 1 (PLCG1) (NM_182811) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phospholipase C gamma 1 (PLCG1) (NM_182811) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Phospholipase C gamma 1
Synonyms:	NCKAP3; PLC-II; PLC1; PLC148; PLCgamma1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

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>RC216391 representing NM_182811
Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence:

>RC216391 representing NM_182811
Red=Cloning site Green=Tags(s)

MAGAASPCANGCGPGAPSDAEVLHLCRSLEVGTVMTLFYSKKSQRPERKTFQVKLETRQITWSRGADKIE
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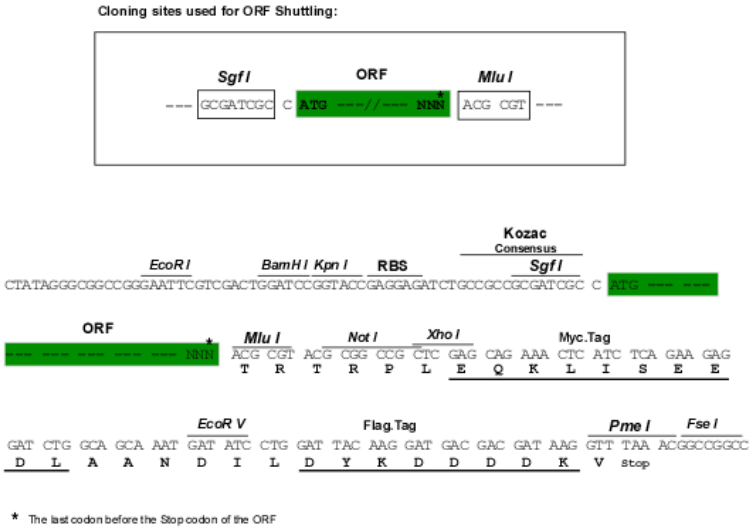
Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_182811

ORF Size: 3870 bp

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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).
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_182811.2
RefSeq Size:	5202 bp
RefSeq ORF:	3873 bp
Locus ID:	5335
UniProt ID:	P19174
Cytogenetics:	20q12
Protein Families:	Druggable Genome
Protein Pathways:	Calcium signaling pathway, Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Glioma, Inositol phosphate metabolism, Leukocyte transendothelial migration, Metabolic pathways, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pathways in cancer, Phosphatidylinositol signaling system, T cell receptor signaling pathway, VEGF signaling pathway, Vibrio cholerae infection
MW:	148.4 kDa

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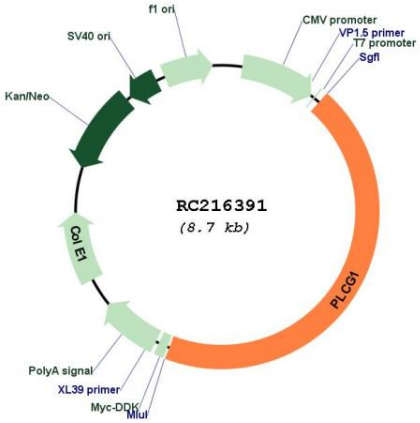
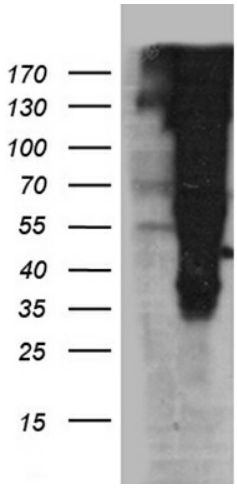
Gene Summary: The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. This reaction uses calcium as a cofactor and plays an important role in the intracellular transduction of receptor-mediated tyrosine kinase activators. For example, when activated by SRC, the encoded protein causes the Ras guanine nucleotide exchange factor RasGRP1 to translocate to the Golgi, where it activates Ras. Also, this protein has been shown to be a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC216391



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PLCG1 (Cat# RC216391, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PLCG1 rabbit polyclonal antibody (Cat# [TA890140]).

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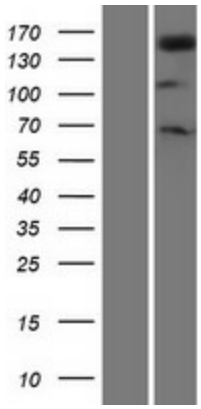

Western blot validation of overexpression lysate (Cat# [LY405368]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216391 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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