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Product datasheet for RG240241

Phospholipase C epsilon 1 (PLCE1) (NM_001288989) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phospholipase C epsilon 1 (PLCE1) (NM_001288989) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Phospholipase C epsilon 1
Synonyms:	NPHS3; PLCE; PPLC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG240241 representing NM_001288989. Blue=ORF Red=Cloning site Green=Tag(s)

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Protein Sequence:

>Peptide sequence encoded by RG240241
Blue=ORF Red=Cloning site Green=Tag(s)

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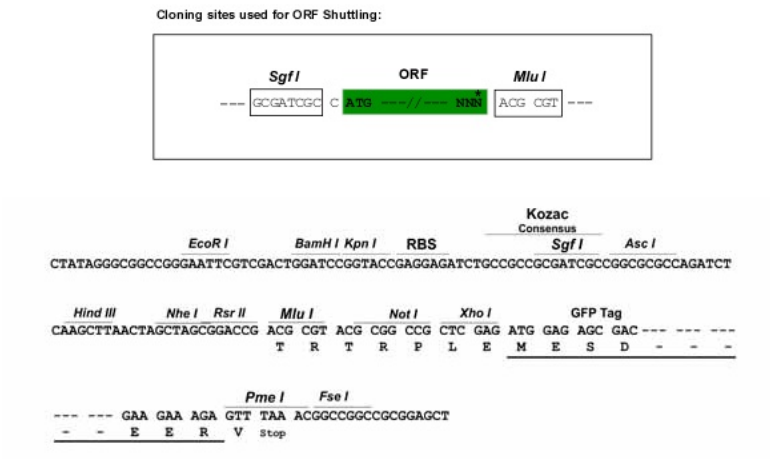
Restriction Sites: SgfI-MluI

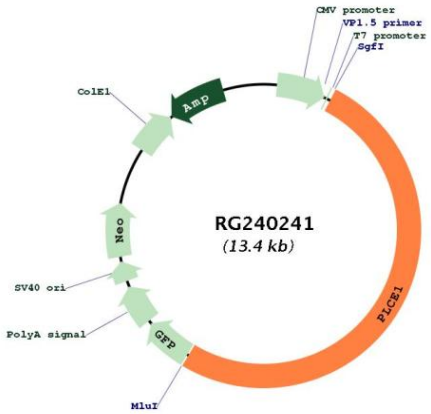
Cloning Scheme:



ACCN:	NM_001288989
ORF Size:	6858 bp
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).
RefSeq:	NM_001288989.2
RefSeq Size:	7957 bp
RefSeq ORF:	6861 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
MW:	257.6 kDa

Gene Summary: 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]

Product images:



Circular map for RG240241