

Product datasheet for RC230716

Phospholipase A2 (PLB1) (NM_001170585) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phospholipase A2 (PLB1) (NM_001170585) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PLB1
Synonyms:	PLB; PLB/LIP
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC230716 representing NM_001170585 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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GGAAGATAATAACCCTGTTTATAGGCGGCAATGACCTCTGTGATTTCTGCAATGATCTGGTTCTCGGGC
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C

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Protein Sequence: >RC230716 representing NM_001170585
 Red=Cloning site Green=Tags(s)

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 ENVTTLPNILREFNRNL TGYAVGTGDANDTNAFLNQAVPGAEDLMSQVQLMQKMKDDHRVNFHEDWK
 VITVLIIGGSDLCDYCTDNL YSAANFVHHLRNALDVLHREVPRVLVNLVDFLNPTIMRQVFLGNPDKCPV
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 DGNLEHTTLPNILKKNPYLLGFSTSTWEGTAGLNVAEAGARADMPAQAWDL VERMKNSPDINLEKDW
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 AQNNCTCLRHSQSLEKQELKKNVWNLQHGISSFSYWHQYTRQEDFAVVVQPFQNTL TPLNERGDTDLT
 FFSEDCFFHSDRGHAEMAIALWNNMLEPVGRKTTNNFTHSRALKCPSPESPYLYTLRNSRLLPDQAE
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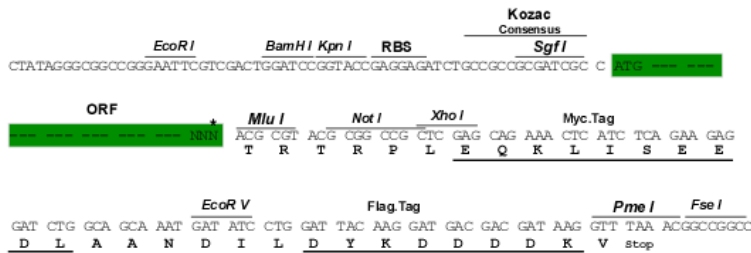
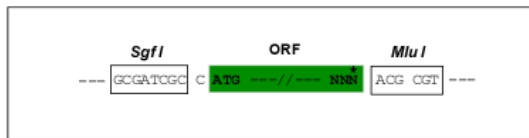
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Restriction Sites:

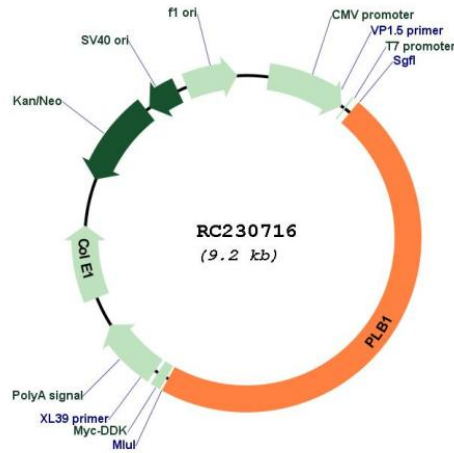
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001170585

ORF Size: 4341 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).

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_001170585.1](#), [NP_001164056.1](#)

RefSeq ORF: 4344 bp

Locus ID: 151056

UniProt ID: [Q6P116](#)

Cytogenetics: 2p23.2

Protein Families: Transmembrane

MW: 162.2 kDa

Gene Summary: This gene encodes a membrane-associated phospholipase that displays lysophospholipase and phospholipase A2 activities through removal of sn-1 and sn-2 fatty acids of glycerophospholipids. In addition, it displays lipase and retinyl ester hydrolase activities. The encoded protein is highly conserved and is composed of a large, glycosylated extracellular domain composed of four tandem homologous domains, followed by a hydrophobic segment that anchors the enzyme to the membrane and a short C-terminal cytoplasmic tail. This gene has been identified as a candidate rheumatoid arthritis risk gene. [provided by RefSeq, Jul 2016]