PLCG2 Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	PLCG2, Blocking Peptide
Full Product Name	PLCG2 Blocking Peptide
Product Gene Name	PLCG2 blocking peptide
Product Synonym Names	1 phosphatidylinositol 4 5 bisphosphate phosphodiesterase gamma 2; 1-phosphatidylinositol-4; 5-bisphosphate phosphodiesterase gamma-2; EC 3.1.4.11; Phosphoinositide phospholipase C; Phosphoinositide phospholipase C-gamma-2; Phospholipase C gamma 2; Phospholipase C, gamma 2 (phosphatidylinositol specific); Phospholipase C-gamma-2; Phospholipase C-IV; PLC 2; PLC gamma 2; PLC IV; PLC-gamma-2; PLC-IV; Plcg2; PLCG2_HUMAN
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	PLCG2 peptide (MBS9617339) is used for blocking the activity of PLCG2 antibody (MBS9601795)
Molecular Weight	147,870 Da
Chromosome Location	Chromosome: 16; NC_000016.9 (81812899..81991899). Location: 16q24.1
OMIM	600220
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for PLCG2 blocking peptide	Blocking/Control
Related Product Information for PLCG2 blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of PLCG2 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for PLCG2 purchase	MBS9617339 is a blocking peptide targeting PLCG2.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for PLCG2. It may not necessarily be applicable to this product.

NCBI GI #	117320537
NCBI GeneID	5336
NCBI Accession #	NP_002652.2

UniProt Primary Accession #	P16885
UniProt Secondary Accession #	Q3ZTS2; Q59H45; Q969T5; D3DUL3
UniProt Related Accession #	P16885
GenBank Nucleotide #	NM_002661.4
NCBI Official Full Name	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2
NCBI Official Synonym Full Names	phospholipase C, gamma 2 (phosphatidylinositol-specific)
NCBI Official Symbol	PLCG2
NCBI Official Synonym Symbols	FCAS3; APLAID
UniProt Protein Name	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2
UniProt Synonym Protein Names	Phosphoinositide phospholipase C-gamma-2; Phospholipase C-IV; PLC-IV; Phospholipase C-gamma-2
Protein Family	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase
UniProt Gene Name	PLCG2
UniProt Synonym Gene Names	PLC-IV; PLC-gamma-2
UniProt Entry Name	PLCG2_HUMAN
NCBI Protein Information	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2; PLC-IV; PLC-gamma-2; phospholipase C-IV; phosphoinositide phospholipase C-gamma-2
NCBI Summary for PLCG2	The protein encoded by this gene is a transmembrane signaling enzyme that catalyzes the conversion of 1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate to 1D-myo-inositol 1,4,5-trisphosphate (IP3) and diacylglycerol (DAG), using calcium as a cofactor. IP3 and DAG are second messenger molecules important for transmitting signals from growth factor receptors and immune system receptors across the cell membrane. [provided by RefSeq, Sep 2011]
UniProt Comments for PLCG2	PLCG2: a calcium dependent phosphatidylinositol-specific phospholipase C. The activated enzyme produces the second messenger molecules diacylglycerol and inositol 1,4,5-trisphosphate. It is a crucial enzyme in transmembrane signaling. Phosphorylated and activated by tyrosine kinases in response to signaling through a variety of growth factor receptors and immune system receptors. Protein type: Motility/polarity/chemotaxis; Carbohydrate Metabolism - inositol phosphate; EC 3.1.4.11; Phospholipase Chromosomal Location of Human Ortholog: 16q24.1 Cellular Component: plasma membrane; cytosol Molecular Function: protein binding; signal transducer activity; phospholipase C activity; phosphoinositide phospholipase C activity Biological Process: platelet activation; Wnt receptor signaling pathway; inositol phosphate metabolic process; phospholipid catabolic process; calcium-mediated signaling; response to lipopolysaccharide; T cell receptor signaling pathway; B cell receptor signaling pathway; activation of store-operated calcium channel activity; inositol trisphosphate biosynthetic process; regulation of gene expression; B cell differentiation; release of sequestered calcium ion into cytosol; negative regulation of programmed cell death; phosphatidylinositol biosynthetic process; innate immune response; follicular B cell differentiation; blood coagulation Disease: Autoinflammation, Antibody Deficiency, And Immune Dysregulation, Plcg2-associated; Familial Cold Autoinflammatory Syndrome 3
Research Articles on PLCG2	**1.** Overexpression of the altered p.Ser707Tyr protein and ex vivo experiments using affected individuals' leukocytes showed clearly enhanced PLCgamma2 activity.

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/blocking-peptide/plcg2/9617339