

## Product datasheet for **TP300442**

### PLCG 2 (PLCG2) (NM\_002661) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human phospholipase C, gamma 2 (phosphatidylinositol-specific) (PLCG2), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC200442 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MSTTVNVDSLAEYEKSIKRALELGTVMTVFSFRKSTPERRTVQVIMETRQVAWSKTADKIEGFLDIMEI  
KEIRPGKNSKDFERAKAVRQKEDCCFTILYGTQFVLSTLSLAADSKEDAVNWLSGLKILHQEAMNASTPT  
IIESWLRKQIYSVDQTRRNSISLRELKTIPLINFKVSASAKFLKDKFVEIGAHKDELSEFQFHLFYKCLM  
FEQQKSILDEFKDKSSVFILGNTDRPDASAVYLRDFQRFLIHEQQEHWAQDLNPKVRERMTKFIDDTMRET  
AEPFLVDFELTYLFSRENSIWDEKYDAVDMQDMNPLSHYWISSSHNTYLTGDQLRSESSPEAYIRCLR  
MGCRCIELDCWDGPDGKPVYHGWTRTTKIKFDDVVAIKDHAFVTSSFPVILSIEEHCSVEQQRHMAKA  
FKEVFGDLLLTKPTEASADQLPSPSQLREKIIKHKKLGPRGDVDVNMEDKKDEHKQQGELYMWDSIDQK  
WTRHYCAIADAKLSFSDDIEQTMEEVQDIPPELHFGEKWFHKKVEKRTSAEKLLQEYCMETGGKDG  
FLVRESETFPNDYTLFWRSGRVQHCRIRSTMEGGTLKYYLTDNLTFSSYALIQHRETHLRCAEFELR  
LTDVPVNPNPHEKPYWYDLSRGEAEDMLMRIPRDGAFLIRKREGSDSYAITFRARGKVKHCRINRDGR  
HFVLGTSAYFESLVELVSYEYKHSYRKMRLRYPVTPPELLERYNMERDINSLYDVSVMYVDPSEINPSMP  
QRTVKALYDYKAKRSELSFCRICALIHNVSKPEGGWWKGDYGTRIQQYFSPNYVEDISTADFELEKQII  
EDNPLGSLCRGILDNLNTYNVVKAPQGKNQKSFVFILEPKQQGYPPVEFATDRVEELFEWFQSIREITWKI  
DTKENNMKYWEKNQSI AIELSDLVYCKPTSKTKDNLENPDFREIRSFVETKADSIIRKQKPVDLLKYNQK  
GLTRVYPKGQRVDSSNYDPFRLWL CGSQMVALNFQTADKYMQMNHALFSLNGRTGYVLQPESMRTEKY  
DP  
MPPEQRKILMTLTVKVLGARHLPKLGSIACPFVEVEICGAEYDNNKFKTTVNDNGLSPIWAPTQEKV  
TFEYDPNLAFLRFVYEEEDMFSDPNFLAHATYPIKAVKSGFRSVPLKNGYSEDIELASLLVFCEMRPVL  
ESEEELYSSCRQLRRRQEELNNQLFLYDTHQNLNRNANRDALVKEFSVNNENQLQLYQEKCCKRLREKRVS  
SKFYS

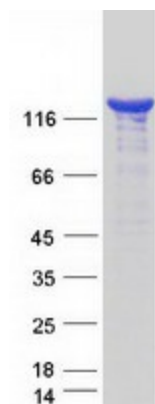
**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-Myc/DDK
Predicted MW:	147.7 kDa



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<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_002652</a>
<b>Locus ID:</b>	5336
<b>UniProt ID:</b>	<a href="#">P16885</a>
<b>RefSeq Size:</b>	8707
<b>Cytogenetics:</b>	16q23.3
<b>RefSeq ORF:</b>	3795
<b>Synonyms:</b>	APLAID; FCAS3; PLC-gamma-2; PLC-IV
<b>Summary:</b>	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. Mutations in this gene have been found in autoinflammation, antibody deficiency, and immune dysregulation syndrome and familial cold autoinflammatory syndrome 3. [provided by RefSeq, Mar 2014]
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	B cell receptor signaling pathway, 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, VEGF signaling pathway, Vibrio cholerae infection

**Product images:**

Coomassie blue staining of purified PLCG2 protein (Cat# TP300442). The protein was produced from HEK293T cells transfected with PLCG2 cDNA clone (Cat# [RC200442]) using MegaTran 2.0 (Cat# [TT210002]).