

For Research Use Only

# PLCB3 Monoclonal antibody

Catalog Number: 66668-1-Ig **4 Publications**



## Basic Information

<b>Catalog Number:</b> 66668-1-Ig	<b>GenBank Accession Number:</b> BC142681	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul, Concentration: 1100 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 5331	<b>CloneNo.:</b> 1B8B3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q01970	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:50-1:500
<b>Isotype:</b> IgG1	<b>Full Name:</b> phospholipase C, beta 3 (phosphatidylinositol-specific)	
<b>Immunogen Catalog Number:</b> AG15845	<b>Calculated MW:</b> 1234 aa, 139 kDa	
	<b>Observed MW:</b> 150 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB	<b>WB :</b> HepG2 cells, Jurkat cells, HSC-T6 cells, NIH/3T3 cells, HeLa cells, Sp2/0 cells, human peripheral blood platelets, HEK-293 cells, K-562, LNCaP cells, K-562 cells
<b>Species Specificity:</b> human, mouse, rat	<b>IHC :</b> human breast cancer tissue, human colon tissue
<b>Cited Species:</b> human, rat	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

PLCB3 is a member of the phosphoinositide phospholipase C beta enzyme family that catalyze the production of the secondary messengers diacylglycerol and inositol 1,4,5-triphosphate from phosphatidylinositol in G-protein-linked receptor-mediated signal transduction. Six subfamilies of PLCs (B, G, D, E, Z and H) constitute part of ubiquitous signaling cascades that translate hormonal signals into intracellular events, leading to alternations in cell function. PLCB isoforms 1-4 are stimulated by G-protein activation (Gaq/11 and/or Gβγ). Independent of its enzymatic activity, PLCB3 inhibits the proliferation of hematopoietic stem cells (HSCs) and myeloid cells.

## Notable Publications

Author	Pubmed ID	Journal	Application
Hongdong Song	35703476	J Food Sci	WB
Yijie Yang	32662128	J Food Biochem	WB
Wenna Zhang	31975557	J Cell Mol Med	WB

## Storage

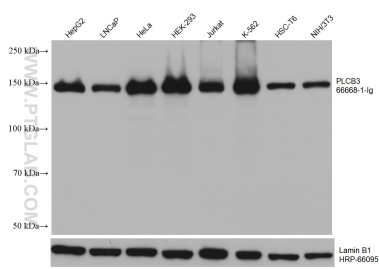
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

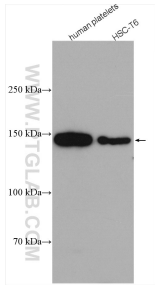
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

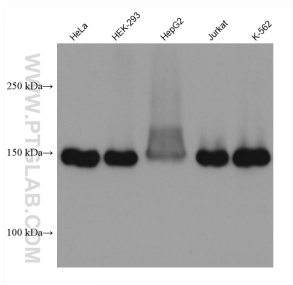
Selected Validation Data



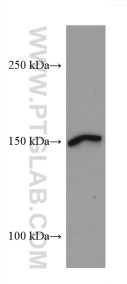
Various lysates were subjected to SDS PAGE followed by western blot with 66668-1-Ig (PLCB3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Lamin B1 Monoclonal antibody (HRP-66095) as loading control.



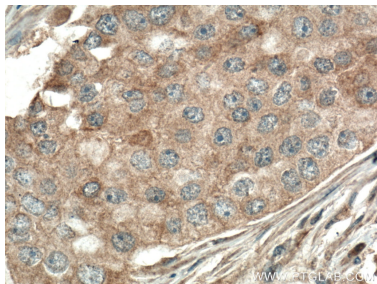
Various lysates were subjected to SDS PAGE followed by western blot with 66668-1-Ig (PLCB3 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



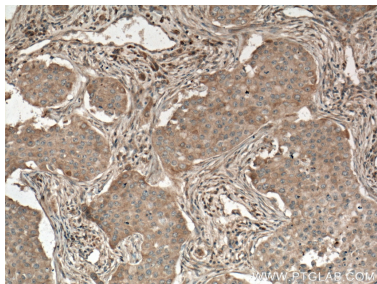
Various lysates were subjected to SDS PAGE followed by western blot with 66668-1-Ig (PLCB3 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



Sp2/O cells were subjected to SDS PAGE followed by western blot with 66668-1-Ig (PLCB3 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66668-1-Ig (PLCB3 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66668-1-Ig (PLCB3 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).