

## 12-4025: Phospho-PLC $\gamma$ 2 (Tyr759) (Clone: G3) rabbit mAb

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	PLCG2Y759-G3
<b>Application :</b>	FACS,WB
<b>Reactivity :</b>	Human, Mouse
<b>Conjugate :</b>	Unconjugated
<b>Format :</b>	Purified
<b>Alternative Name :</b>	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-2, Phosphoinositide phospholipase C-gamma-2, PLC-IV, PLC-gamma-2, PLCG2
<b>Isotype :</b>	Rabbit IgG1k
<b>Immunogen Information :</b>	A synthetic phospho-peptide corresponding to residues surrounding Tyr759 of human phospho PLC $\gamma$ 2.

### Description

The PLC-gamma isoforms of the PI-PLC family of lipases are regulated by growth factor receptors and B- and T-cell antigen receptors. While PLC $\gamma$ 1 is expressed ubiquitously, PLC $\gamma$ 2 is predominantly expressed in liver cells. PLC $\gamma$ 2 plays a dominant role in B-cell signaling. Btk directly phosphorylates PLC $\gamma$ 2, though the Syk kinase and BLNK adaptor protein are required. Both Tyr753 and Tyr759 have been identified as important phosphorylation sites for PLC $\gamma$ 2 activation in B-cells. PLC $\gamma$ 2 missense mutations and genomic deletions have been identified in autoimmune diseases in humans. These include gain-of-function mutations, such as S707T, that possibly introduce an additional phosphorylation site and increase basal PLC $\gamma$ 2 activity.

### Product Info

<b>Amount :</b>	20 $\mu$ l / 200 $\mu$ l
<b>Content :</b>	1X PBS, 0.02% NaN <sub>3</sub> , 50% Glycerol, 0.1% BSA
<b>Storage condition :</b>	Store at -20°C. Avoid repeated freeze and thaw cycles.

### Application Note

1  $\mu$ g/mL - 0.001  $\mu$ g/mL. It is recommended that the reagent be titrated for optimal performance for each application. See product image legends for additional information.(0.5mg/ml, more than 200 western blots)

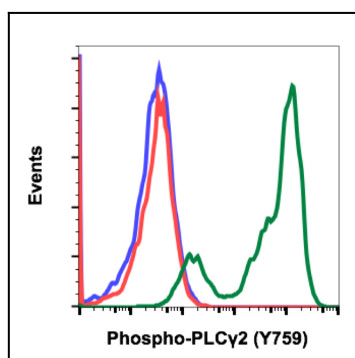


Fig-1: Flow cytometric analysis of Ramos cells secondary antibody only negative control (blue) or untreated (red) or treated with pervanadate (green) using 0.01  $\mu$ g/mL Phospho-PLC $\gamma$ 2 (Tyr759) antibody PLCG2Y759-G3. .

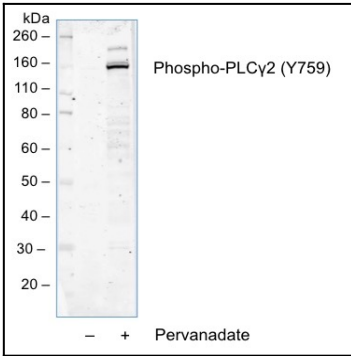


Fig 2 : Western blot analysis of Ramos cell extract untreated or treated with pervanadate using Phospho-PLCg2 (Tyr759) antibody PLCG2Y759-G3.

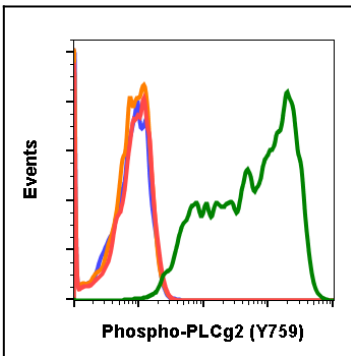


Fig-3: Flow cytometric analysis of NIH3T3 cells secondary antibody only negative control (blue) or 0.1 µg/mL of isotype control (orange) or treated with imatinib (red) or with pervanadate (green) using Phospho-PLCg2 (Tyr759) antibody PLCG2Y759-G3 at 0.1 µg/mL.

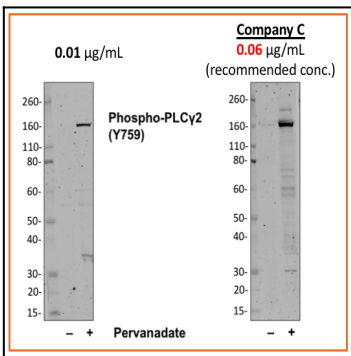


Fig-4: Western blot analysis of Ramos cell extract untreated or treated with pervanadate using 0.01 µg/mL Phospho-PLCg2 (Tyr759) antibody PLCG2Y759-G3 or Company C antibody at 0.06 µg/mL (manufacturer's recommended concentration) developed using the same exposure.