

## Product Data Sheet: Purified anti-phospho-PLC $\gamma$ 1 (Tyr783) rabbit mAb

<b>Catalog Number:</b>	2201
<b>Clone:</b>	PLCG1Y783-C4
<b>Isotype:</b>	Rabbit IgG1 $\kappa$
<b>Immunogen:</b>	A synthetic phospho-peptide corresponding to residues surrounding Tyr783 of human phospho PLC $\gamma$ 1.
<b>Reactivity:</b>	Mouse, Human
<b>Cross Reactivity:</b>	Predicted to work with mouse, rat, and other homologues.
<b>Preparation:</b>	Protein A+G
<b>Formulation:</b>	1X PBS, 0.02% NaN <sub>3</sub> , 50% Glycerol, 0.1% BSA
<b>Applications:</b>	Flow Cytometry
<b>Recommended Usage:</b>	1.0 - 0.1 $\mu$ g/ml. Optimum concentration should be determined by the user.
<b>Product Configuration:</b>	200 $\mu$ l (0.5mg/ml)
<b>Detection:</b>	Anti-Rabbit IgG

### Description

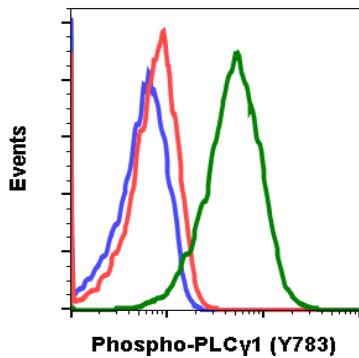
The Phospholipase C (PLC) isozymes hydrolyze phosphatidyl inositolphosphate to inositol triphosphate and diacylglycerol. In response to extracellular stimuli such as hormones, growth factors and neurotransmitters, PLC hydrolyzes phosphatidylinositol 4,5-bisphosphate (PIP<sub>2</sub>) to generate diacylglycerols (DAGs) and water-soluble phosphorylated derivatives, such as inositol 1,4,5-triphosphate (IP<sub>3</sub>). Within the PLC family, PLC $\gamma$  is the only member that contains SH2 and SH3 domains, necessary for phospho PLC $\gamma$  activation. Phospho PLC $\gamma$ , upon activation, can interact with receptor tyrosine kinases.

### References

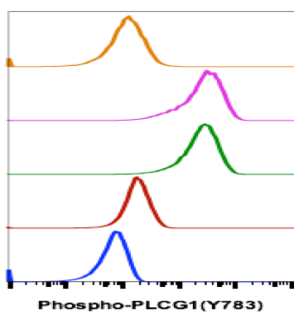
1. Singer, W.D. et al. (1997) Annu. Rev. Biochem. 66, 475–509.
2. Hernandez D, et al. (1994) Genomics 23 (2): 504–507.
3. Smrcka, A.V. et al. (1991) Science 251, 804–807.
4. Taylor, S.J. et al. (1991) Nature 350, 516–518.

### Purified anti-phospho-PLC $\gamma$ 1 (Tyr783) rabbit mAb Images

Flow cytometric analysis of Hela cells, secondary antibody only negative control (blue) or treated with imatinib (red) or with pervanadate (green) using 0.01 µg/mL Phospho-PLCγ1 (Tyr783) antibody PLCg1Y783-C4. Cat. #2201.



Peptide blockage flow cytometric analysis of Hela cells, secondary antibody only negative control (blue), treated with imatinib (red), treated with pervanadate (green), treated with PV + blocked with non-phospho-peptide (violet) or treated with PV + blocked with phospho-peptide (brown) using Phospho-PLCγ1 (Tyr783) antibody at 0.05 µg/mL PLCg1Y783-C4. Cat. #2201.



SWELLID	Treatment	Median : BL1-A
C4+PP	PV	1188
C4+NP	PV	27480
C4 0.05 ug/mL	PV	24493
C4 0.05 ug/mL	imatinib	1784
2°Ab	imatinib	699

PLCg1Y783-C4 recognizes basal phosphorylation levels in mouse cells. Flow cytometric analysis of L929 cells, secondary antibody only (blue) or 0.1 µg/mL of isotype control Cat. #2141 (orange) or of Phospho-PLCγ1 (Tyr783) antibody PLCg1Y783-C4 (green) Cat. #2201.

