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|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product name:</b>     | PLC $\gamma$ 2 (phospho Tyr1217) Rabbit Polyclonal Antibody                                                                                    |
| <b>Cat number:</b>       | ABN05287                                                                                                                                       |
| <b>Conjugate:</b>        | Unconjugated                                                                                                                                   |
| <b>Size:</b>             | 100 $\mu$ L                                                                                                                                    |
| <b>Clone:</b>            | Polyclonal                                                                                                                                     |
| <b>Concentration:</b>    | 1mg/ml                                                                                                                                         |
| <b>Host:</b>             | Rabbit                                                                                                                                         |
| <b>Isotype:</b>          | IgG                                                                                                                                            |
| <b>Immunogen:</b>        | The antiserum was produced against synthesized peptide derived from human PLCG2 around the phosphorylation site of Tyr1217. AA range:1186-1235 |
| <b>Reactivity:</b>       | Human,Mouse,Rat                                                                                                                                |
| <b>Applications:</b>     | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000                                                                       |
| <b>Molecular Weight:</b> | 148kDa                                                                                                                                         |
| <b>Purification:</b>     | Affinity purification                                                                                                                          |
| <b>Form:</b>             | Liquid                                                                                                                                         |
| <b>Buffer:</b>           | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.                                                             |
| <b>Storage:</b>          | Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.                                                   |

**Background:**

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], catalytic activity: 1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate + H<sub>2</sub>O = 1D-myo-inositol 1,4,5-trisphosphate + diacylglycerol., cofactor: Calcium., function: The production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) is mediated by activated phosphatidylinositol-specific phospholipase C enzymes. It is a crucial enzyme in transmembrane signaling., PTM: Phosphorylated on tyrosine residues; upon ligand-induced activation of a variety of growth factor receptors and immune system receptors. Increases phospholipase activity., similarity: Contains 1 C2 domain., similarity: Contains 1 PH domain., similarity: Contains 1 PI-PLC X-box domain., similarity: Contains 1 PI-PLC Y-box domain., similarity: Contains 1 SH3 domain., similarity: Contains 2 SH2 domains.,