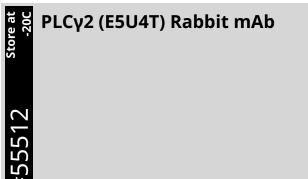
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Applications: W, W-S, IP, IF-IC	Reactivity: H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 150	<b>Source/Isotype:</b> Rabbit IgG	UniProt ID: #P16885	Entrez-Gene Id: 5336	
Product Usage Information		Application Western Blotting Simple Western™ Immunoprecipitation Immunofluorescence		5.		<b>Dilution</b> 1:1000 1:10 - 1:50 1:100 1:800	
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.					
Specificity/Sen	<b>Specificity/Sensitivity</b> PLCy2 (E5U4T) Rabbit mAb recognizes endogenous levels of total PLCy2 protein.						
Source / Purific	ation	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human PLCγ2 protein.					
Background		Phosphoinositide-specific phospholipase C (PLC) plays a significant role in transmembrane signaling. In response to extracellular stimuli, such as hormones, growth factors, and neurotransmitters, PLC hydrolyzes phosphatidylinositol 4,5-bisphosphate (PIP <sub>2</sub> ) to generate two secondary messengers: inositol 1,4,5-triphosphate (IP <sub>3</sub> ) and diacylglycerol (DAG) (1). At least four families of PLCs have been identified: PLC $\beta$ , PLC $\gamma$ , PLC $\delta$ , and PLC $\epsilon$ . Phosphorylation is one of the key mechanisms that regulate the activity of PLC. PLC $\gamma$ is activated by both receptor and non-receptor tyrosine kinases (2). PLC $\gamma$ forms a complex with EGF and PDGF receptors, which leads to the phosphorylation of PLC $\gamma$ at Tyr771, 783, and 1248 (3). Phosphorylation by Syk at Tyr783 activates the enzymatic activity of PLC $\gamma$ 1 (4). PLC $\gamma$ 2 is engaged in antigen-dependent signaling in B cells and collagen-dependent signaling in platelets. Phosphorylation by Btk or Lck at Tyr753, 759, 1197, and 1217 is correlated with PLC $\gamma$ 2 activity (5,6).					
Background Re	eferences	1. Singer, W.D. et al. (1997) <i>Annu Rev Biochem</i> 66, 475-509. 2. Margolis, B. et al. (1989) <i>Cell</i> 57, 1101-7. 3. Kim, H.K. et al. (1991) <i>Cell</i> 65, 435-41. 4. Wang, Z. et al. (1998) <i>Mol Cell Biol</i> 18, 590-7. 5. Watanabe, D. et al. (2001) <i>J Biol Chem</i> 276, 38595-601. 6. Ozdener, F. et al. (2002) <i>Mol Pharmacol</i> 62, 672-9.					
Species Reactiv	/ity	Species reactivity is de	etermined by testing	g in at least one approve	ed application (e.g.	, western blot).	
Western Blot B	uffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.					
Applications Ke	ey	<b>W:</b> Western Blotting <b>W-S:</b> Simple Western™ <b>IP:</b> Immunoprecipitation <b>IF-IC:</b> Immunofluorescence (Immunocytochemistry)					
Cross-Reactivit	у Кеу	H: Human					
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