## PLCG2 Conjugated Antibody

Catalog No: #C32647



 Package Size:
 #C32647-AF350 100ul
 #C32647-AF405 100ul
 #C32647-AF488 100ul

 #C32647-AF555 100ul
 #C32647-AF594 100ul
 #C32647-AF647 100ul

 #C32647-AF680 100ul
 #C32647-AF750 100ul
 #C32647-Biotin 100ul

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

## Description

Product Name	PLCG2 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total PLCG2 protein.
Immunogen Description	Recombinant protein of human PLCG2.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	PLCG2;APLAID;FCAS3
Accession No.	Swiss-Prot#:P16885NCBI Gene ID:5336
Uniprot	P16885
GeneID	5336;
Excitation Emission	AF350: 346nm/442nm
	AF405: 401nm/421nm
	AF488: 493nm/519nm
	AF555: 555nm/565nm
	AF594: 591nm/614nm
	AF647: 651nm/667nm
	AF680: 679nm/702nm
	AF750: 749nm/775nm
Calculated MW	150
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## **Application Details**

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250		
AF405 conjugated: most applications: 1: 50 - 1: 250		
AF488 conjugated: most applications: 1: 50 - 1: 250		
AF555 conjugated: most applications: 1: 50 - 1: 250		
AF594 conjugated: most applications: 1: 50 - 1: 250		
AF647 conjugated: most applications: 1: 50 - 1: 250		
AF680 conjugated: most applications: 1: 50 - 1: 250		
AF750 conjugated: most applications: 1: 50 - 1: 250		
Biotin conjugated: working with enzyme-conjugated str		

Antibodies were purified by affinity purification using immunogen.

## 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 (PIP2) to generate two secondary messengers: inositol 1,4,5-triphosphate (IP3) and diacylglycerol (DAG) (1). At least four families of PLCs have been identified: PLCβ, PLCβ, PLCδ and PLCε. The PLCβ subfamily includes four members, PLCβ1-4. All four members of the subfamily are activated by α- or β-γ-subunits of the heterotrimeric G-proteins (2,3).Phosphorylation is one of the key mechanisms that regulates the activity of PLC. Phosphorylation of Ser1105 by PKA or PKC inhibits PLCβ3 activity (4,5). Ser537 of PLCβ3 is phosphorylated by CaMKII, and this phosphorylation may contribute to the basal activity of PLCβ3. PLCγ is activated by both receptor and nonreceptor tyrosine kinases (6).PLCγ forms a complex with EGF and PDGF receptors, which leads to the phosphorylation of PLCγ at Tyr771, 783 and 1245 (7). Phosphorylation by Syk at Tyr783 activates the enzymatic activity of PLCγ1 (8). PLCγ2 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 PLCγ2 activity (9,10

Note: This product is for in vitro research use only