

Anti-PLCE1 antibody



Description	Unconjugated Rabbit polyclonal to PLCE1
Model	STJ191893
Host	Rabbit
Reactivity	Human
Applications	IHC
Gene ID	51196
Gene Symbol	PLCE1
Dilution range	IHC-p 1:50-300
Specificity	PLCE1 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Widely expressed. Isoform 1 is broadly expressed and only absent in peripheral blood leukocytes. Isoform 2 is specifically expressed in placenta, lung and spleen.
Purification	PLCE1 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase epsilon-1 Pancreas-enriched phospholipase C Phosphoinositide phospholipase C-epsilon-1 Phospholipase C-epsilon-1 PLC-epsilon-1
Molecular Weight	253 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:17175 OMIM:608414
Alternative Names	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase epsilon-1 Pancreas-enriched phospholipase C Phosphoinositide phospholipase C-epsilon-1 Phospholipase C-epsilon-1 PLC-epsilon-1
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. PLCE1 is a bifunctional enzyme which also regulates small GTPases of the Ras superfamily through its Ras guanine-exchange factor (RasGEF) activity. As an effector of heterotrimeric and small G-protein, it may play a role in cell survival, cell growth, actin organization and T-cell activation.
Sequence and Domain Family	The Ras-associating domain 1 is degenerated and may not bind HRAS. The Ras-associating domain 2 mediates interaction with GTP-bound HRAS, RAP1A, RAP2A and RAP2B and recruitment of HRAS to the cell membrane.; The Ras-GEF domain has a GEF activity towards HRAS and RAP1A. Mediates activation of the mitogen-activated protein kinase pathway.
Cellular Localization	Cytoplasm, cytosol. Cell membrane. Golgi apparatus membrane. Recruited to plasma membrane by activated HRAS and RAP2. Recruited to perinuclear membrane by activated RAP1A. Isoform 1 and isoform 2 associates with Golgi membranes.