

产品名称: PLCE1 Rabbit Polyclonal Antibody

产品货号: APRab16256

产品概述 (Summary)

描述(Description)	Rabbit polyclonal Antibody
宿主(Host)	Rabbit
应用(Application)	IHC, ICC/IF
种属反应(Reactivity)	Human, Rat, Mouse
偶联物(Conjugation)	Unconjugated
修饰(Modification)	Unmodified
同种型(Isotype)	IgG
克隆(Clonality)	Polyclonal
剂型(Form)	Liquid
保存条件(Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液(Buffer)	Liquid in PBS containing 50% glycerol, and 0.02% New type preservative N.
纯化 (Purification)	Affinity purification

产品应用(Application)

稀释比(Dilution Ratio)	IHC 1:50-1:300, ICC/IF 1:50-1:200
分子量(Molecular Weight)	253kDa

抗原信息(Antigen Information)

基因名(Gene Name)	PLCE1
别名(Alternative Names)	KIAA1516 PLCE PPLC
基因 ID(Gene ID)	51196.0
SwissProt ID	Q9P212
免疫原(Immunogen)	Synthesized peptide derived from part region of human protein

研究背景 (Background)

This gene encodes a phospholipase enzyme that catalyzes the hydrolysis of phosphatidylinositol-4,5-bisphosphate to generate two second messengers: inositol 1,4,5-triphosphate (IP3) and diacylglycerol (DAG). These second messengers subsequently regulate various processes affecting cell growth, differentiation, and gene expression. This enzyme is regulated by small monomeric GTPases of the Ras and Rho families and by heterotrimeric G proteins. In addition to its phospholipase C catalytic

activity, this enzyme has an N-terminal domain with guanine nucleotide exchange (GEF) activity. Mutations in this gene cause early-onset nephrotic syndrome; characterized by proteinuria, edema, and diffuse mesangial sclerosis or focal and segmental glomerulosclerosis. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Sep 2009],catalytic activity:1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate + H(2)O = 1D-myo-inositol 1,4,5-trisphosphate + diacylglycerol.,cofactor:Calcium.,disease:Defects in PLCE1 are the cause of nephrotic syndrome type 3 (NPHS3) [MIM:610725]; also called early-onset nephrotic syndrome type 3. Nephrotic syndrome, a malfunction of the kidney glomerular filter, leads to proteinuria, hypoalbuminemia, edema. End-stage kidney disease is observed in steroid-resistant nephrotic syndrome.,domain: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.,domain:The Ras-GEF domain has a GEF activity towards HRAS and RAP1A. Mediates activation of the mitogen-activated protein kinase pathway.,enzyme regulation:Activated by the heterotrimeric G-protein subunits GNA12, GNA13 and GNB1-GNG2. Activated by HRAS, RAP1A, RHOA, RHOB, RHOC, RRAS and RRAS2. Activated by the G(s)-coupled GPCRs ADRB2, PTGER1 and CHRM3 through cyclic-AMP formation and RAP2B activation. Inhibited by G(i)-coupled GPCRs.,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.,induction:Overexpressed during heart failure.,similarity:Contains 1 C2 domain.,similarity:Contains 1 PI-PLC X-box domain.,similarity:Contains 1 PI-PLC Y-box domain.,similarity:Contains 1 Ras-GEF domain.,similarity:Contains 2 Ras-associating domains.,subcellular location: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.,subunit:Interacts with RHOA (By similarity). Interacts with IQGAP1, HRAS, RAP1A, RAP2A, RAP2B and RRAS.,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.,

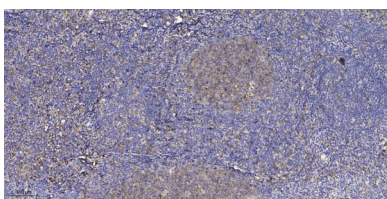
研究领域 (Research Area)

Inositol phosphate metabolism;Calcium;Phosphatidylinositol signaling system;

注意事项 (Note)

For research use only.

图片 (Image Data)



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200 (4° overnight) . 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) .

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产品类别	产品货号	产品名称
WB 解决方案	RA10020	2h 极速 WB 即用型全流程试剂盒
	RA10021	4h 快速 WB 即用型全流程试剂盒
	RA10042	5h 畅享版 WB 全流程试剂盒
	RA10037	校准级彩色预染蛋白 Marker (8-180kDa)
	RA10038	校准级彩色预染蛋白 Marker (10-250kDa)
	RA10039	校准级高分子彩色预染蛋白 Marker (25-400kDa)
TSA 多重荧光染色试剂盒	RA10008	TSA 双标三色多重荧光染色试剂盒 (mIHC)
	RA10009	TSA 三标四色多重荧光染色试剂盒 (mIHC)
	RA10010	TSA 四标五色多重荧光染色试剂盒 (mIHC)
	RA10011	TSA 五标六色多重荧光染色试剂盒 (mIHC)
	RA10012	TSA 六标七色多重荧光染色试剂盒 (mIHC)
IHC 检测试剂盒	RA10006	HRP Anti-Mouse/Rabbit IHC Detection System
	RA10007	Polymer-HRP Anti-Mouse/Rabbit IHC Detection System
抗体标记试剂盒	RE80004p	辣根过氧化物酶(HRP)抗体标记试剂盒
	RE80002q	Sulfo-NHS-生物素标记试剂盒
	RE80007p	Cy3 荧光素标记试剂盒
	RE80011p	Fluor488 荧光素标记试剂盒
	RE80017p	Fluor750 荧光素标记试剂盒
	RE80005p	藻红蛋白(R-PE) 抗体快速标记试剂盒
	RE80040	PE-Cy7 串联染料抗体快速标记试剂盒
稳转细胞系构建服务 (免费赠送全膜 WB 验证)	TS-0001	过表达稳转细胞系构建
	TS-0002	敲低稳转细胞系构建
	TS-0003	敲除细胞系构建

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