

## PLCE1 Rabbit pAb

CatalogNo: YN1789

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human,Rat,Mouse,

#### Applications

- IHC,IF

#### MW

- 253kD (Observed)

#### Isotype

- IgG

### Recommended Dilution Ratios

IHC 1:50-300

IF 1:50-200

### Storage

**Storage\*** -15°C to -25°C/1 year(Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**Immunogen** Synthesized peptide derived from part region of human protein

**Specificity** PLCE1 Polyclonal Antibody detects endogenous levels of protein.

### Target Information

**Gene name** PLCE1 KIAA1516 PLCE PPLC

**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)

Organism	Gene ID	UniProt ID
Human	<a href="#">51196</a> ;	<a href="#">Q9P212</a> ;
Mouse		<a href="#">Q8K4S1</a> ;
Rat		<a href="#">Q99P84</a> ;

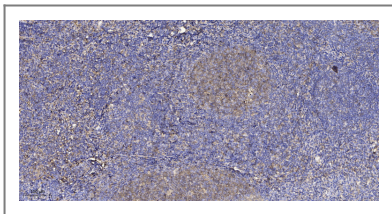
**Cellular Localization** Cytoplasm, cytosol. Cell membrane. Golgi apparatus membrane. Cell projection, lamellipodium . Recruited to plasma membrane by activated HRAS and RAP2. Recruited to perinuclear membrane by activated RAP1A. Isoform 1 and isoform 2 associates with Golgi membranes.

**Tissue specificity** Widely expressed. Expressed in podocytes (PubMed:29058690). ; [Isoform 1]: Broadly expressed and only absent in peripheral blood leukocytes. ; [Isoform 2]: Specifically expressed in placenta, lung and spleen.

**Function** 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.,

---

## Validation 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).

## | Contact information

Orders: [order.cn@immunoway.com](mailto:order.cn@immunoway.com)  
Support: [support.cn@immunoway.com](mailto:support.cn@immunoway.com)  
Telephone: 400-8787-807(China)  
Website: <http://www.immunoway.com.cn>  
Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:  
**PLCE1 Rabbit pAb**

---

For Research Use Only. Not for Use in Diagnostic Procedures.

[Antibody](#) | [ELISA Kits](#) | [Protein](#) | [Reagents](#)