

Datasheet for ABIN6258304  
**anti-PIP5K1C antibody (Internal Region)**[Go to Product page](#)

## 2 Images

## Overview

Quantity:	100 µL
Target:	PIP5K1C
Binding Specificity:	Internal Region
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PIP5K1C antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunocytochemistry (ICC), Immunofluorescence (IF)

## Product Details

Immunogen:	A synthesized peptide derived from human PIP5K1C, corresponding to a region within the internal amino acids.
Isotype:	IgG
Specificity:	PIP5K1C Antibody detects endogenous levels of total PIP5K1C.
Predicted Reactivity:	Pig,Bovine,Sheep,Dog,Chicken
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

## Target Details

Target:	PIP5K1C
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## Target Details

Alternative Name: PIP5K1C ([PIP5K1C Products](#))

**Background:** Description: Catalyzes the phosphorylation of phosphatidylinositol 4-phosphate (PtdIns4P) to form phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P<sub>2</sub>). PtdIns(4,5)P<sub>2</sub> is involved in a variety of cellular processes and is the substrate to form phosphatidylinositol 3,4,5-trisphosphate (PtdIns(3,4,5)P<sub>3</sub>), another second messenger. The majority of PtdIns(4,5)P<sub>2</sub> is thought to occur via type I phosphatidylinositol 4-phosphate 5-kinases given the abundance of PtdIns4P. Participates in a variety of cellular processes such as vesicle mediated transport, cell adhesion, cell polarization and cell migration. Together with PIP5K1A is required for phagocytosis, but they regulate different types of actin remodeling at sequential steps. Promotes particle attachment by generating the pool of PtdIns(4,5)P<sub>2</sub> that induces controlled actin depolymerization to facilitate Fc-gamma-R clustering. Mediates RAC1-dependent reorganization of actin filaments. Required for synaptic vesicle transport. Controls the plasma membrane pool of PtdIns(4,5)P<sub>2</sub> implicated in synaptic vesicle endocytosis and exocytosis. Plays a role in endocytosis mediated by clathrin and AP-2 (adaptor protein complex 2). Required for clathrin-coated pits assembly at the synapse. Participates in cell junction assembly. Modulates adherens junctions formation by facilitating CDH1 trafficking. Required for focal adhesion dynamics. Modulates the targeting of talins (TLN1 and TLN2) to the plasma membrane and their efficient assembly into focal adhesions. Regulates the interaction between talins (TLN1 and TLN2) and beta-integrins. Required for uropodium formation and retraction of the cell rear during directed migration. Has a role in growth factor- stimulated directional cell migration and adhesion. Required for talin assembly into nascent adhesions forming at the leading edge toward the direction of the growth factor. Negative regulator of T-cell activation and adhesion. Negatively regulates integrin alpha-L/beta-2 (LFA-1) polarization and adhesion induced by T-cell receptor. Together with PIP5K1A has a role during embryogenesis and together with PIP5K1B may have a role immediately after birth.

Gene: PIP5K1C

Molecular Weight: 80 kDa

Gene ID: 23396

UniProt: [O60331](#)

Pathways: [PI3K-Akt Signaling](#), [Inositol Metabolic Process](#), [Cell-Cell Junction Organization](#), [Maintenance of Protein Location](#), [Synaptic Vesicle Exocytosis](#)

## Application Details

Application Notes: WB 1:500-1:1000, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000

Restrictions: For Research Use only

## Handling

Format: Liquid

Concentration: 1 mg/mL

Buffer: Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

Preservative: Sodium azide

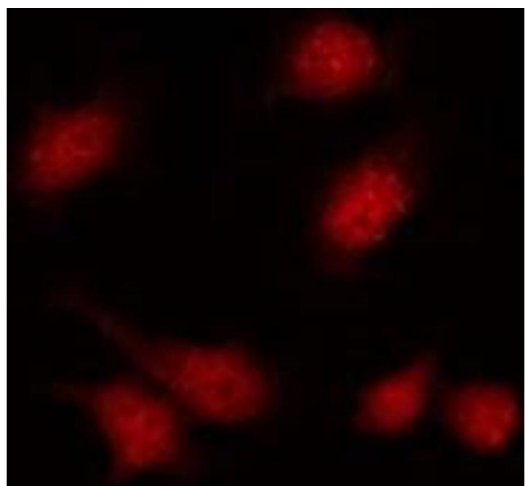
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store at -20 °C. Stable for 12 months from date of receipt.

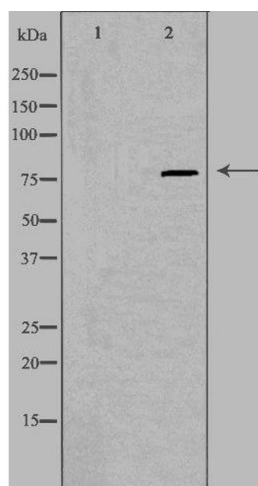
Expiry Date: 12 months

## Images



### Immunofluorescence (fixed cells)

**Image 1.** ABIN6275357 staining A549 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



### Western Blotting

**Image 2.** Western blot analysis of extracts from A549 cells, using PIP5K1C antibody. The lane on the left is treated with the antigen-specific peptide.