

**DATASHEET**

**PIP4K2 alpha Rabbit Polyclonal Antibody**

CAT. NO. APA14664

**KEY FEATURES**

Target	PIP4K2 alpha	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at-20°C

**BACKGROUND**

Catalyzes the phosphorylation of phosphatidylinositol 5-phosphate (PtdIns5P) on the fourth hydroxyl of the myo-inositol ring, to form phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P2) on the fourth hydroxyl of the myo-inositol ring, to form phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P2). Has both ATP- and GTP-dependent kinase activities. May exert its function by regulating the levels of PtdIns5P, which functions in the cytosol by increasing AKT activity and in the nucleus signals through ING2. May regulate the pool of cytosolic PtdIns5P in response to the activation of tyrosine phosphorylation. Required for lysosome-peroxisome membrane contacts and intracellular cholesterol transport through modulating peroxisomal PtdIns(4,5)P2 level.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IHC	1:50 - 1:200
IF/ICC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to PIP4K2 alpha
Specificity	Recognizes endogenous levels of PIP4K2 alpha protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human PIP4K2 alpha
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 39; Observed: 46 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	PIP5K2; PIP5K2A; Phosphatidylinositol 5-phosphate 4-kinase type-2 alpha; 1-phosphatidylinositol 5-phosphate 4-kinase 2-alpha; Diphosphoinositide kinase 2-alpha; PIP5KIII; Phosphatidylinositol 5-phosphate 4-kinase type II alpha; PI(5)P 4-kinase type II alpha; PIP4KII-alpha; PtdIns(4)P-5-kinase B isoform; PtdIns(4)P-5-kinase C isoform; PtdIns(5)P-4-kinase isoform 2-alpha
Gene Symbol	PIP4K2A
Entrez Gene	5305(Human); 18718(Mouse); 116723(Rat)
SwissProt	P48426(Human); O70172(Mouse); Q9R0I8(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

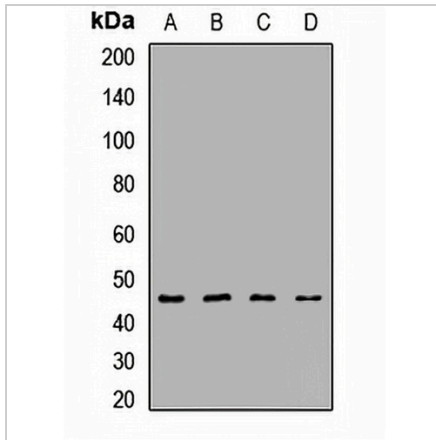
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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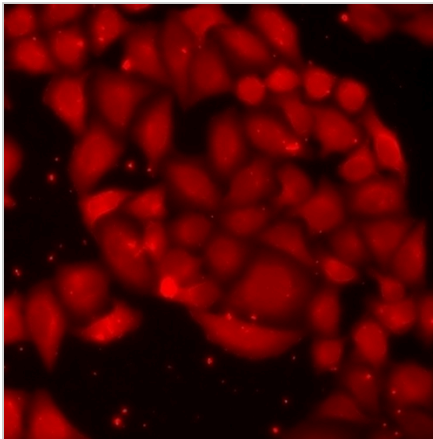
**DATA**



Western blot analysis of PIP4K2 alpha expression in Jurkat (A), MCF7 (B), mouse brain (C), rat brain (D) whole cell lysates. (Predicted band size: 39; 46 kD; Observed band size: 46 kD)

Data 2

Immunohistochemical analysis of PIP4K2 alpha staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of PIP4K2 alpha staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.