

Product datasheet for **AP14962PU-N**

PIP5K1 alpha (PIP5K1A) (N-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	ELISA: 1/1,000. Western blotting: 1/100 - 1/500.
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the N-terminal region of human PIP5K1A.
Specificity:	This antibody reacts to PIP5K1A.
Formulation:	PBS with 0.09% (W/V) sodium azide State: Purified State: Liquid purified Ig
Concentration:	lot specific
Purification:	Protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	phosphatidylinositol-4-phosphate 5-kinase type 1 alpha
Database Link:	Entrez Gene 8394 Human Q99755



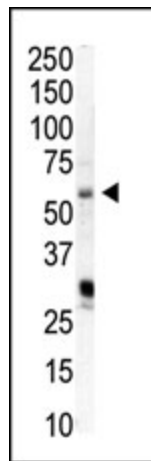
[View online »](#)

Background:

Overexpression of phosphatidylinositol phosphate 5-kinase alpha (PIP5K1alpha), which synthesizes PIP2, suppresses apoptosis, whereas a kinase-deficient mutant does not. Protection by the wild-type PIP5K1alpha is accompanied by decreases in the generation of activated caspases and of caspase 3-cleaved PARP. Protection is not mediated through PIP3 or Akt activation. An anti-apoptotic role for PIP(2) is substantiated by the finding that PIP5K1alpha is cleaved by caspase 3 during apoptosis, and cleavage inactivates PIP5K1alpha in vitro. Mutation of the P(4) position (D279A) of the PIP5K1alpha caspase 3 cleavage consensus prevents cleavage in vitro, and during apoptosis in vivo. Significantly, the caspase 3-resistant PIP5K1alpha mutant is more effective in suppressing apoptosis than the wild-type kinase. PIP2 is a direct regulator of apical and effector caspases in the death receptor and mitochondrial pathways, and PIP5K1alpha inactivation contributes to the progression of apoptosis.

Synonyms:

PIP5K1-alpha, PIP5K1alpha, PtdIns(4)P-5-kinase 1 alpha

Product images:

Western blot analysis of anti-PIP5K1A Pab in HeLa cell lysate. PIP5K1A (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.