

ITPKA Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8166b

Product Information

Application	WB, E
Primary Accession	P23677
Other Accession	NP_002211
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5359
Calculated MW	51009
Antigen Region	345-375

Additional Information

Gene ID	3706
Other Names	Inositol-trisphosphate 3-kinase A, Inositol 1, 5-trisphosphate 3-kinase A, IP3 3-kinase A, IP3K A, InsP 3-kinase A, ITPKA
Target/Specificity	This ITPKA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 345-375 amino acids from the C-terminal region of human ITPKA.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ITPKA Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ITPKA (HGNC:6178)
Function	Catalyzes the phosphorylation of 1D-myo-inositol 1,4,5- trisphosphate (InsP3) into 1D-myo-inositol 1,3,4,5-tetrakisphosphate and participates to the

regulation of calcium homeostasis.

Cellular Location Cytoplasm, cytoskeleton

Tissue Location Expressed in brain..

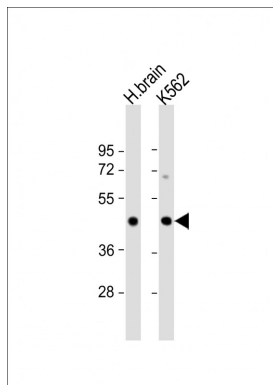
Background

ITPKA regulates inositol phosphate metabolism by phosphorylation of second messenger inositol 1,4,5-trisphosphate to Ins(1,3,4,5)P₄. The activity of the inositol 1,4,5-trisphosphate 3-kinase is responsible for regulating the levels of a large number of inositol polyphosphates that are important in cellular signaling. Both calcium/calmodulin and protein phosphorylation mechanisms control its activity. It is also a substrate for the cyclic AMP-dependent protein kinase, calcium/calmodulin-dependent protein kinase II, and protein kinase C in vitro. ITPKA and ITPKB are 68% identical in the C-terminus region.

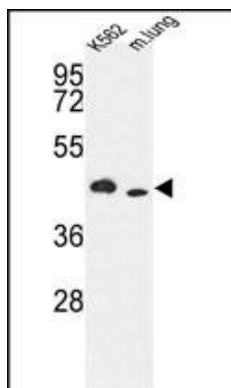
References

Gonzalez, B., et al., Mol. Cell 15(5):689-701 (2004).
Mishra, J., et al., Biophys. J. 83(3):1298-1316 (2002).
Schell, M.J., et al., J. Biol. Chem. 276(40):37537-37546 (2001).
Communi, D., et al., EMBO J. 16(8):1943-1952 (1997).
Woodring, P.J., et al., J. Biol. Chem. 272(48):30447-30454 (1997).

Images



All lanes : Anti-ITPKA Antibody (C-term) at 1:1000 dilution
Lane 1: human brain lysate Lane 2: K562 whole cell lysate
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 51 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of hITPKA-E360 (Cat.# AP8166b) in K562 cell line and mouse lung tissue lysates (35ug/lane). ITPKA (arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.