ARG44891
anti-PIKFYVE antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes PIKFYVE
Tested Reactivity	Hu
Tested Application	IHC-P
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Target Name	PIKFYVE
Species	Human
Epitope	AEEGDDNLAN SASPSKRTSV SSFQSTVDSD SAASISLNVE LDNVNFHIKK PSKYPHVPPH PADQKEYLIS DTGGQQLSIS DAFIKESLFN RRVEEKSKEL PFTPLGWHHN NLELLREENG
Conjugation	Un-conjugated
Alternate Names	PIKFYVE; Phosphoinositide Kinase, FYVE-Type Zinc Finger Containing; KIAA0981; ZFYVE29; PIP5K3; PIP5K; FAB1; Phosphatidylinositol-3-Phosphate/Phosphatidylinositol 5-Kinase, Type III; Phosphatidylinositol 3-Phosphate 5-Kinase Type III; Phosphoinositide Kinase, FYVE Finger Containing ; 1-Phosphatidylinositol 3-Phosphate 5-Kinase; Zinc Finger, FYVE Domain Containing 29; Serine-Protein Kinase PIKFYVE; Type III PIP Kinase; PIPkin-III; MGC40423; P235; FYVE Finger-Containing Phosphoinositide Kinase; Phosphatidylinositol 3-Phosphate 5-Kinase; Epididymis Luminal Protein 37; EC 2.7.1.150; EC 2.7.11.1; PIKfyve; HEL37; CFD

Application Instructions

Application table

Application	Dilution
IHC-P	1:100

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

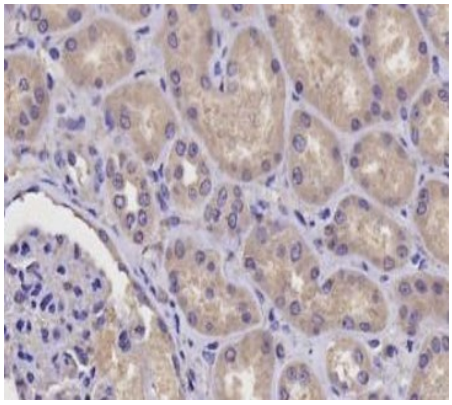
Properties

Form	Liquid
Purification	Protein A purification
Buffer	PBS with 0.09% sodium azide
Preservative	0.09% sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PIKFYVE
Gene Full Name	Phosphoinositide Kinase, FYVE-Type Zinc Finger Containing
Background	Phosphorylated derivatives of phosphatidylinositol (PtdIns) regulate cytoskeletal functions, membrane trafficking, and receptor signaling by recruiting protein complexes to cell- and endosomal-membranes. Humans have multiple PtdIns proteins that differ by the degree and position of phosphorylation of the inositol ring. This gene encodes an enzyme (PIKfyve; also known as phosphatidylinositol-3-phosphate 5-kinase type III or PIPKIII) that phosphorylates the D-5 position in PtdIns and phosphatidylinositol-3-phosphate (PtdIns3P) to make PtdIns5P and PtdIns(3,5)biphosphate. The D-5 position also can be phosphorylated by type I PtdIns4P-5-kinases (PIP5Ks) that are encoded by distinct genes and preferentially phosphorylate D-4 phosphorylated PtdIns. In contrast, PIKfyve preferentially phosphorylates D-3 phosphorylated PtdIns. In addition to being a lipid kinase, PIKfyve also has protein kinase activity. PIKfyve regulates endomembrane homeostasis and plays a role in the biogenesis of endosome carrier vesicles from early endosomes. The protein plays a key role in cell entry of ebola virus and SARS-CoV-2 by endocytosis Mutations in this gene cause corneal fleck dystrophy (CFD); an autosomal dominant disorder characterized by numerous small white flecks present in all layers of the corneal stroma. Histologically, these flecks appear to be keratocytes distended with lipid and mucopolysaccharide filled intracytoplasmic vacuoles. [provided by RefSeq, Jul 2021]
Function	(Microbial infection) Required for cell entry of coronaviruses SARS-CoV and SARS-CoV-2, as well as human coronavirus EMC (HCoV-EMC) by endocytosis. [Uniprot]
PTM	Acetylation, Phosphoprotein. [Uniprot]
Cellular Localization	Cytoplasmic vesicle, Endosome, Membrane. [Uniprot]

Images



ARG44891 anti-PIKFYVE antibody IHC-P image

Immunohistochemistry: Human kidney stained with ARG44891 anti-PIKFYVE antibody at 10 µg/mL dilution.