PIKFYVE Rabbit pAb

Catalog NO.: A6689 2 Publications

Basic Information

Observed MW
250kDa

Calculated MW
237kDa

Category
Polyclonal Antibodies

Applications
WB, ELISA

Cross-Reactivity
Human, Mouse, Rat

Conjugation
Unconjugated

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.

Recommended Dilutions

WB	1:100 - 1:500

ELISA
Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID
200576

Swiss Prot
Q9Y2I7

Immunogen
Recombinant protein (or fragment).This information is considered to be commercially sensitive.

Synonyms
CFD; FAB1; HEL37; PIP5K; PIP5K3; ZFYVE29; PIKFYVE

Contact

Product Information

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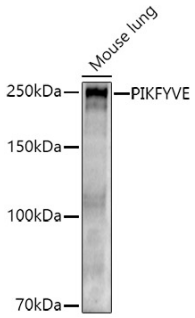
Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage
Store at -20°C. Avoid freeze / thaw cycles.
Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Validation Data



Western blot analysis of lysates from Mouse lung, using PIKFYVE Rabbit pAb (A6689) at 1:500 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 180s.

For research use only. Not for therapeutic or diagnostic purposes.

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