

Echelon Biosciences Inc.

PIKfyve antibody, polyclonal

Z-RPK5

Support: echelon@echelon-inc.com

Description:

Rabbit polyclonal antibody to murine PIKfyve with reactivity to mouse/rat and human PIKfyve

Applications:

IF/ICC – 2-5 ug/mL
Western – 1.0 ug/mL
Immunoprecipitation – 1.0 ug/mL

Other in vitro and cellular applications are possible using this antibody, but have not been verified by Echelon Biosciences.

Properties:

Form – liquid
Storage instructions – protect from direct light and store at 4°C for up to 30 days. For long term storage, aliquot and store at -80°C. Avoid repeated freeze/thaw cycles.
Storage buffer – PBS, pH 7.4
Concentration – 0.5 or 1.0 ug/mL. See label for lot specific information.
Purity – affinity purified using Protein A chromatography
Immunogen – synthetic fusion peptide of aa 1-100
Clonality – polyclonal
Isotype – IgG

Specificity:

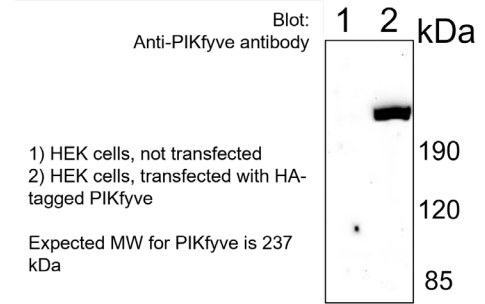
The PIKfyve antibody is directed at an N-terminal region of PIKfyve and detects mammalian forms of PIKfyve with an expected molecular weight of approximately 237 kDa.

Background:

PIKfyve is a lipid kinase enzyme found on early endosomes where it synthesizes PI(3,5)P2 from membrane-associated PI(3)P. Endosomal PIKfyve forms a complex with ArPIKfyve (Vac14) and Sac3 (FIG4) to regulate fusion, transport, and export of endosomes in the cell. PIKfyve also has protein kinase activity in the form of self-regulatory autophosphorylation.

Data:

Western blot for PIKfyve in transfected and untransfected HEK293 cells



References:

- Lees J, Li P, Kumar N, Weisman L, Reinisch K., (2020) Insights into Lysosomal PI(3,5)P2 Homeostasis from a Structural-Biochemical Analysis of the PIKfyve Lipid Kinase Complex. Mol Cell. 80:1-8
- Shisheva A, Sbrissa D, Ikononov O (1999) Cloning, Characterization, and Expression of a Novel Zn2+-Binding FYVE Finger-Containing Phosphoinositide Kinase in Insulin-Sensitive Cells. Mol & Cell Bio. 19(1):623-634
- Sbrissa D, Ikononov O, Shisheva A et al. (2004) A Mammalian Ortholog of Saccharomyces cerevisiae Vac14 That Associates with and Up-Regulates PIKfyve Phosphoinositide 5-Kinase Activity. Mol & Cell Bio. 24(23): 10437-10447

Related Products:

Products	Catalog Number
Assays and Reagents	
PI(3,5)P2 PolyPIPosomes	Y-P035
PI(3,5)P2 PIP Beads	P-B035a
Aptilimod	B-0308
Lipids and Antibodies	
diC16, diC8 PI(3,5)P2	P-3516, P-3508
Anti-PI(3,5)P2	Z-P035
Anti-Vac14	Z-RV14

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