

PIP5KIII Polyclonal Antibody

Description

Product type	Primary Antibody
Code	BT-AP07185
Host	Rabbit
Isotype	IgG
Size	20ul, 50ul, 100ul
Immunogen	The antiserum was produced against synthesized peptide derived from human PIP5K. AA range:71-120
Mol wt	237108
Species reactivity	Human, Mouse
Clonality	Polyclonal
Recommended application	WB, IF, ELISA
Concentration	1 mg/ml
Full name	PIP5KIII Antibody
Synonyms	PIKFYVE; KIAA0981; PIP5K3; 1-phosphatidylinositol 3-phosphate 5-kinase; Phosphatidylinositol 3-phosphate 5-kinase; FYVE finger-containing phosphoinositide kinase; PIKfyve; Phosphatidylinositol 3-phosp

This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

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. PIKFYVE 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. Mutations in PIKFYVE 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. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

Recommended Dilution

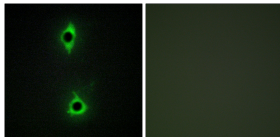
WB: 1: 500 - 1: 2000

IF: 1: 200 - 1: 1000

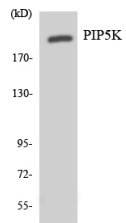
ELISA: 1: 5000

Not yet tested in other applications.

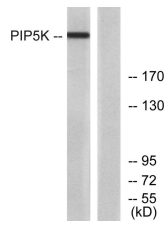
Images



Immunofluorescence analysis of COS7 cells, using PIP5K Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from Jurkat cells using PIP5K antibody.



Western blot analysis of lysates from HepG2 cells, using PIP5K Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using PIP5KIII Polyclonal Antibody

Storage

-20°C for one year

501 Changsheng S Rd, Nanhu Dist, Jiaxing, Zhejiang, China

Tel: 86 21 31007137 | E-mail: save@bt-laboratory.com | www.bt-laboratory.com