

## PIP5KIII Polyclonal Antibody

### Description

<b>Product type</b>	Primary Antibody
<b>Code</b>	BT-AP07184
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Size</b>	20ul, 50ul, 100ul
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PIP5K. AA range:273-322
<b>Mol wt</b>	237108
<b>Species reactivity</b>	Human, Mouse, Rat
<b>Clonality</b>	Polyclonal
<b>Recommended application</b>	IHC-p, ELISA
<b>Concentration</b>	1 mg/ml
<b>Full name</b>	PIP5KIII Antibody
<b>Synonyms</b>	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 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. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

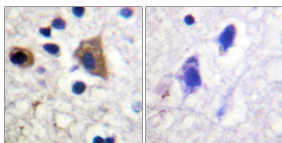
### Recommended Dilution

IHC: 1: 100 - 1: 300

ELISA: 1: 5000

Not yet tested in other applications.

### Images



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using PIP5K Antibody. The picture on the right is blocked with the synthesized peptide.

### 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](mailto:save@bt-laboratory.com) | [www.bt-laboratory.com](http://www.bt-laboratory.com)