

Datasheet for ABIN2729013
PIKFYVE Protein (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	50 µg
Target:	PIKFYVE
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PIKFYVE protein is labelled with His tag.
Application:	Antibody Production (AbP), Standard (STD)

Product Details

Characteristics:	<ul style="list-style-type: none">• Recombinant human PIP5K3 (full length, N-term HIS tag, transcript variant 4) protein expressed in E.coli.• Produced with end-sequenced ORF clone
Purity:	> 80 % as determined by SDS-PAGE and Coomassie blue staining

Target Details

Target:	PIKFYVE
Alternative Name:	Pip5k3 (PIKFYVE Products)
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

Target Details

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.[provided by RefSeq, May 2010].

Molecular Weight: 62 kDa

NCBI Accession: [NP_001171471](#)

Pathways: [Inositol Metabolic Process](#)

Application Details

Application Notes: Recombinant human proteins can be used for:
Native antigens for optimized antibody production
Positive controls in ELISA and other antibody assays

Comment: The tag is located at the N-terminal.

Restrictions: For Research Use only

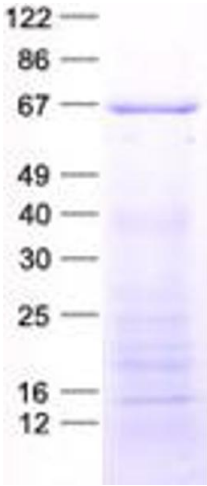
Handling

Concentration: 50 µg/mL

Buffer: 25 mM Tris, pH 8.0, 150 mM NaCl, 10 % glycerol, 1 % Sarkosyl.

Storage: -80 °C

Storage Comment: Store at -80°C. Thaw on ice, aliquot to individual single-use tubes, and then re-freeze immediately. Only 2-3 freeze thaw cycles are recommended.



Western Blotting

Image 1. Validation with Western Blot