

## 磷脂酰肌醇 3 磷酸激酶 5III型抗体

产品货号： mlR18540

英文名称： PIP5K3

中文名称： 磷脂酰肌醇 3 磷酸激酶 5III型抗体

别名： 1-phosphatidylinositol-3-phosphate 5-kinase; 1 phosphatidylinositol 3 phosphate 5 kinase; 1 phosphatidylinositol 4 phosphate 5 kinase; CFD; FAB1; FYVE finger containing phosphoinositide kinase; KIAA0981; MGC40423; p235; Phosphatidylinositol 3 phosphate 5 kinase type III; Phosphatidylinositol 3 phosphate/phosphatidylinositol 5 kinase type III; Phosphatidylinositol 4 phosphate 5 kinase type III; Phosphoinositide kinase, FYVE finger containing; PIKFYVE; PIP5K; PIPkin III; PtdIns(4)P 5 kinase; Type III PIP kinase; ZFYVE29; Zinc finger, FYVE domain containing 29.

研究领域： 肿瘤 细胞生物 信号转导 激酶和磷酸酶 细胞骨架

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Sheep,

产品应用： ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 ICC=1:100-500 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分子量： 237kDa

细胞定位： 细胞浆

性 状 : Lyophilized or Liquid

浓 度 : 1mg/ml

免 疫 原 : KLH conjugated synthetic peptide derived from human PIP5K3:251-350/2098

亚 型 : IgG

纯化方法 : affinity purified by Protein A

储 存 液 : 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件 : Store at -20 ° C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20° C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ° C.

PubMed : PubMed

**产品介绍 :** 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. 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]

**Function:**

The PI(3,5)P<sub>2</sub> regulatory complex regulates both the synthesis and turnover of phosphatidylinositol 3,5-

bisphosphate (PtdIns(3,5)P<sub>2</sub>). Catalyzes the phosphorylation of phosphatidylinositol 3-phosphate on the fifth hydroxyl of the myo-inositol ring, to form phosphatidylinositol 3,5-bisphosphate. Required for endocytic-vacuolar pathway and nuclear migration. Plays a role in the biogenesis of endosome carrier vesicles (ECV)/ multivesicular bodies (MVB) transport intermediates from early endosomes.

**Subcellular Location:**

Endosome membrane

**Post-translational modifications:**

Phosphorylated in response to insulin at Ser-318 in a protein kinase B (PKB)-dependent manner.

**DISEASE:**

Corneal dystrophy, fleck (CFD) [MIM:121850]: A form of stromal corneal dystrophy characterized by numerous small white flecks scattered in all levels of the stroma, with configurations varying from semicircular to wreath-like, curvilinear, or punctate. Although CFD may occasionally cause mild photophobia, patients are typically asymptomatic and have normal vision.

**Similarity:**

Contains 1 DEP domain.

Contains 1 FYVE-type zinc finger.

Contains 1 PIPK domain.

**SWISS:**

Q9Y2I7

**Gene ID:**

200576

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.