

Product datasheet for TA357775

OriGene Technologies, Inc.

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PIP5K1 alpha (PIP5K1A) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: WB

Reactivity: Human Rabbit

Clonality: Polyclonal

Immunogen: The immunogen is a synthetic peptide directed towards the middle region of Human PIP5K1A

Specificity: Expected reactivity: Human

Formulation: Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2%

sucrose.

Note that this product is shipped as lyophilized powder to China customers.

Concentration: lot specific

Purification:Affinity PurifiedConjugation:Unconjugated

Storage: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small

aliquots to prevent freeze-thaw cycles.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 61kDa

Gene Name: phosphatidylinositol-4-phosphate 5-kinase type 1 alpha

Database Link: Entrez Gene 8394 Human

Q99755



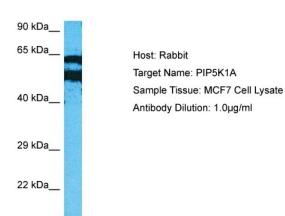


Background:

PIP5K1A catalyzes the phosphorylation of phosphatidylinositol 4- phosphate (PtdIns4P) to form phosphatidylinositol 4,5-bisphosphate (PtdIns(4,5)P2). PtdIns(4,5)P2 is involved in a variety of cellular processes and is the substrate to form phosphatidylinositol 3,4,5-trisphosphate (PtdIns(3,4,5)P3), another second messenger. The majority of PtdIns(4,5)P2 is thought to occur via type I phosphatidylinositol 4-phosphate 5-kinases given the abundance of PtdIns4P. Participates in a variety of cellular processes such as actin cytoskeleton organization, cell adhesion, migration and phagocytosis. Required for membrane ruffling formation, actin organization and focal adhesion formation during directional cell migration by controlling integrin-induced translocation of RAC1 to the plasma membrane. Together with PIP5K1C is required for phagocytosis, but they regulate different types of actin remodeling at sequential steps. Promotes particle ingestion by activating WAS that induces Arp2/3 dependent actin polymerization at the nascent phagocytic cup. Together with PIP5K1B is required after stimulation of G-protein coupled receptors for stable platelet adhesion. Plays a role during calcium-induced keratinocyte differentiation.

Synonyms: PIP5Klalpha

Product images:



Host: Rabbit

Target Name: PIP5K1A

Sample Type: MCF7 Whole Cell lysates

Antibody Dilution: 1.0ug/ml