

Product datasheet for **CF502285**

PIP5K2 alpha (PIP4K2A) Mouse Monoclonal Antibody [Clone ID: OTI1B2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI1B2
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:2000, IF 1:100, FLOW 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PIP4K2A (NP_005019) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	46 kDa
Gene Name:	phosphatidylinositol-5-phosphate 4-kinase type 2 alpha
Database Link:	NP_005019 Entrez Gene 18718 Mouse Entrez Gene 116723 Rat Entrez Gene 5305 Human P48426



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Background:

Phosphatidylinositol-5,4-bisphosphate, the precursor to second messengers of the phosphoinositide signal transduction pathways, is thought to be involved in the regulation of secretion, cell proliferation, differentiation, and motility. The protein encoded by this gene is one of a family of enzymes capable of catalyzing the phosphorylation of phosphatidylinositol-5-phosphate on the fourth hydroxyl of the myo-inositol ring to form phosphatidylinositol-5,4-bisphosphate. The amino acid sequence of this enzyme does not show homology to other kinases, but the recombinant protein does exhibit kinase activity. This gene is a member of the phosphatidylinositol-5-phosphate 4-kinase family. [provided by RefSeq]

Synonyms:

PI5P4KA; PIP5K2A; PIP5KII-alpha; PIP5KIIA; PIPK

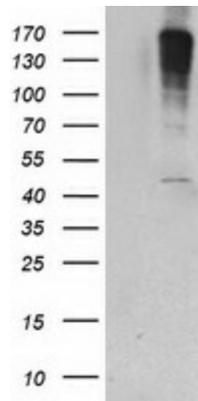
Protein Families:

Druggable Genome

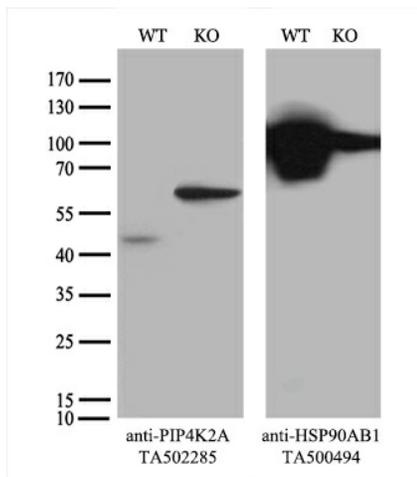
Protein Pathways:

Inositol phosphate metabolism, Phosphatidylinositol signaling system, Regulation of actin cytoskeleton

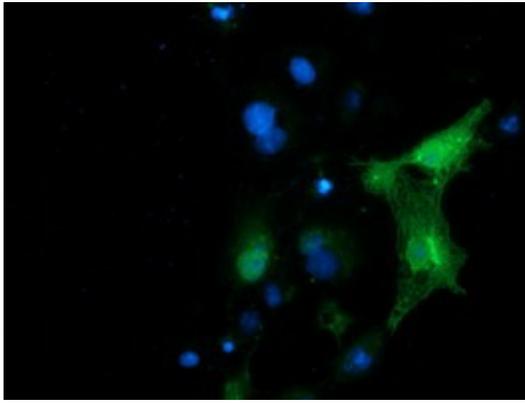
Product images:



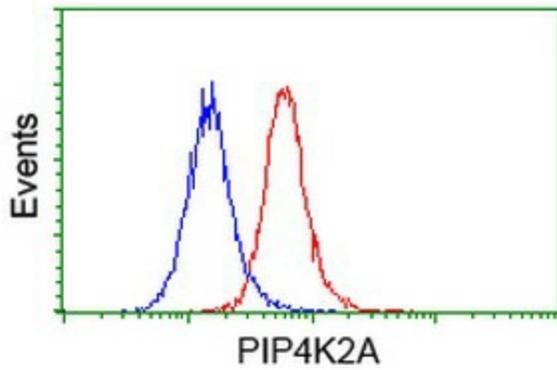
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PIP4K2A ([RC205243], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PIP4K2A. Positive lysates [LY417590] (100ug) and [LC417590] (20ug) can be purchased separately from OriGene.



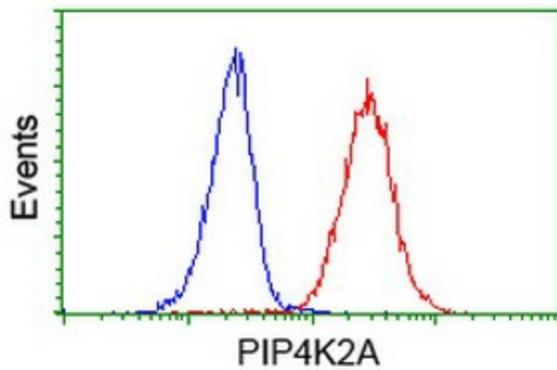
Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and PIP4K2A-Knockout HeLa cells (KO, Cat# [LC830842]) were separated by SDS-PAGE and immunoblotted with anti-PIP4K2A monoclonal antibody [TA502285] (1:100). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.



Anti-PIP4K2A mouse monoclonal antibody ([TA502285]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PIP4K2A ([RC205243]).



Flow cytometric Analysis of HeLa cells, using anti-PIP4K2A antibody ([TA502285]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).



Flow cytometric Analysis of Jurkat cells, using anti-PIP4K2A antibody ([TA502285]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).