

## Product datasheet for **CF502271**

### PIP5K2 alpha (PIP4K2A) Mouse Monoclonal Antibody [Clone ID: OTI3D3]

#### Product data:

|                         |  |
|-------------------------|--|
| Product Type:           | Primary Antibodies   |
| Clone Name:             | OTI3D3   |
| Applications:           | FC, IHC, WB  |
| Recommended Dilution:   | WB: 1:200 - 1:1000, IHC 1:150, 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:          | <a href="#">NP_005019</a><br><a href="#">Entrez Gene 18718 Mouse</a> <a href="#">Entrez Gene 116723 Rat</a> <a href="#">Entrez Gene 5305 Human</a><br><a href="#">P48426</a>   |



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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

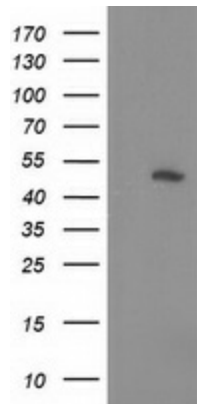
**Protein Families:**

Druggable Genome

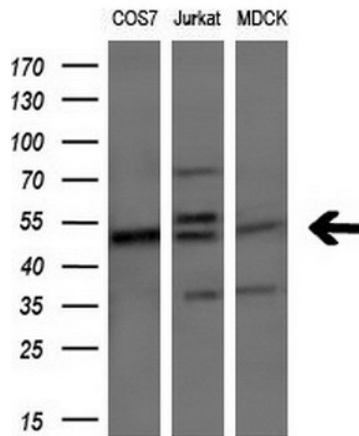
**Protein Pathways:**

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

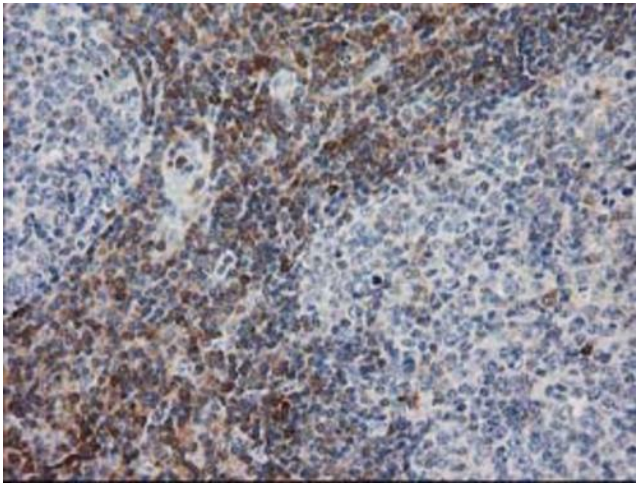
**Product images:**



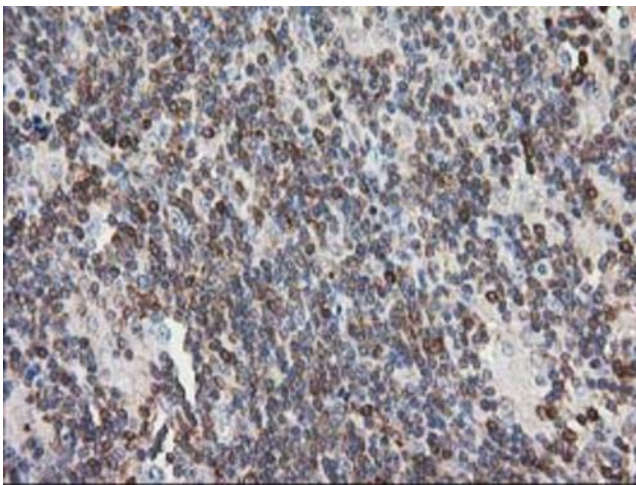
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PIP4K2A (Cat# [RC205243], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PIP4K2A (Cat# [TA502271]). Positive lysates [LY417590] (100ug) and [LC417590] (20ug) can be purchased separately from OriGene.



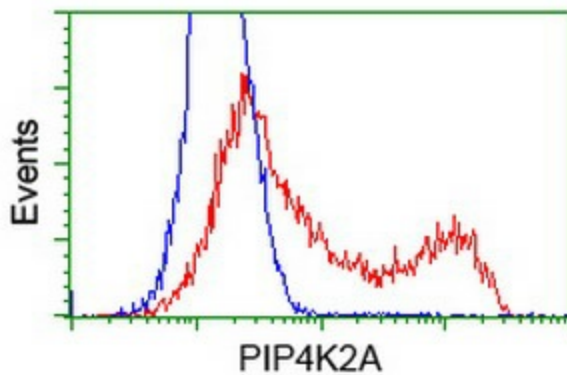
Western blot analysis of extracts (10ug) from 3 different cell lines by using anti-PIP4K2A monoclonal antibody (1:200).



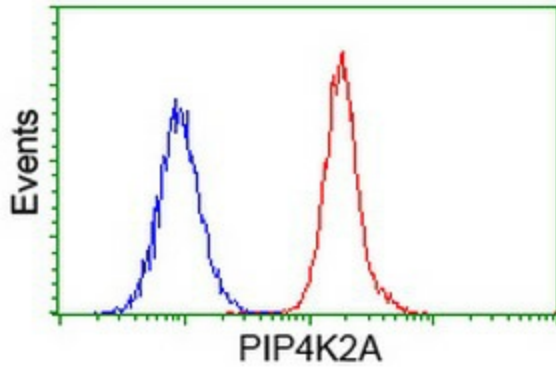
Immunohistochemical staining of paraffin-embedded Human lymph node tissue within the normal limits using anti-PIP4K2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



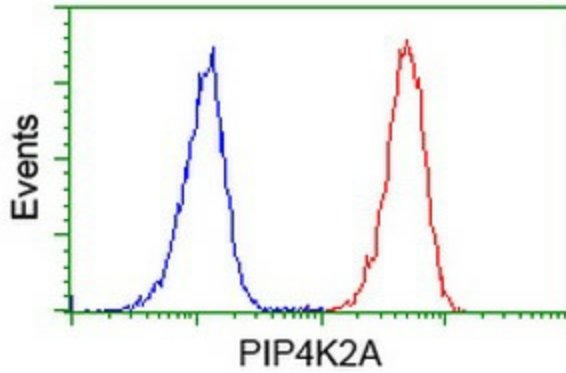
Immunohistochemical staining of paraffin-embedded Human lymphoma tissue using anti-PIP4K2A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



HEK293T cells transfected with either [RC205243] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-PIP4K2A antibody ([TA502271]), and then analyzed by flow cytometry.



Flow cytometric Analysis of HeLa cells, using anti-PIP4K2A antibody ([TA502271]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).



Flow cytometric Analysis of Jurkat cells, using anti-PIP4K2A antibody ([TA502271]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).