10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FIG4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP18145b

Specification

FIG4 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q92562
Other Accession	Q91WF7, NP_055660.1
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**103635**
Antigen Region	**846-874**

FIG4 Antibody (C-term) - Additional Information

Gene ID 9896

Other Names
Polyphosphoinositide phosphatase, 313-, Phosphatidylinositol 3, 5-bisphosphate 5-phosphatase, SAC domain-containing protein 3, FIG4, KIAA0274, SAC3

Target/Specificity
This FIG4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 846-874 amino acids from the C-terminal region of human FIG4.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
FIG4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

FIG4 Antibody (C-term) - Protein Information

Name FIG4 (HGNC:16873)

Function Dual specificity phosphatase component of the PI(3,5)P2 regulatory complex which regulates both the synthesis and turnover of phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2) (PubMed:17556371, PubMed:33098764). Catalyzes the dephosphorylation of phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2) to form phosphatidylinositol 3-phosphate (PubMed:33098764). Has serine-protein phosphatase activity acting on PIKfyve to stimulate its lipid kinase activity, its catalytically activity being required for maximal PI(3,5)P2 production (PubMed:33098764). In vitro, hydrolyzes all three D5-phosphorylated polyphosphoinositide and although displaying preferences for PtdIns(3,5)P2, it is capable of hydrolyzing PtdIns(3,4,5)P3 and PtdIns(4,5)P2, at least in vitro (PubMed:17556371).

Cellular Location
Endosome membrane. Note=Localization requires VAC14 and PIKFYVE

FIG4 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FIG4 Antibody (C-term) - Images

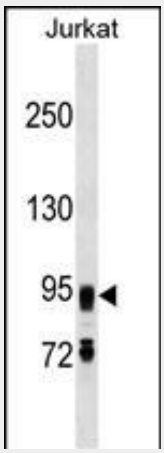

FIG4 Antibody (C-term) (Cat. #AP18145b) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the FIG4 antibody detected the FIG4 protein (arrow).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

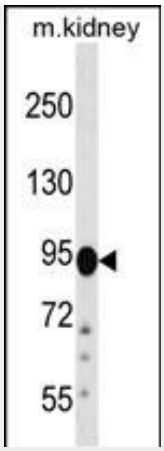

FIG4 Antibody (C-term) (Cat. #AP18145b) western blot analysis in mouse kidney tissue lysates (35ug/lane).This demonstrates the FIG4 antibody detected the FIG4 protein (arrow).

FIG4 Antibody (C-term) - Background

The protein encoded by this gene belongs to the SAC domain-containing protein gene family. The SAC domain, approximately 400 amino acids in length and consisting of seven conserved motifs, has been shown to possess phosphoinositide phosphatase activity. The yeast homolog, Sac1p, is involved in the regulation of various phosphoinositides, and affects diverse cellular functions such as actin cytoskeleton organization, Golgi function, and maintenance of vacuole morphology. Membrane-bound phosphoinositides function as signaling molecules and play a key role in vesicle trafficking in eukaryotic cells. Mutations in this gene have been associated with Charcot-Marie-Tooth disease, type 4J.

FIG4 Antibody (C-term) - References

Ikonomov, O.C., et al. J. Biol. Chem. 285(35):26760-26764(2010)
Tsai, C.P., et al. Neurobiol. Aging (2010) In press :
Ikonomov, O.C., et al. J. Biol. Chem. 284(51):35794-35806(2009)
Soranzo, N., et al. Nat. Genet. 41(11):1182-1190(2009)
Trynka, G., et al. Gut 58(8):1078-1083(2009)