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

FIG4 Polyclonal Antibody

Catalog # AP74251

Product Information

Application	WB, E
Primary Accession	Q92562
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	103635

Additional Information

Gene ID	9896
Other Names	Polyphosphoinositide phosphatase (EC 3.1.3.-) (Phosphatidylinositol 3, 5-bisphosphate 5-phosphatase) (SAC domain-containing protein 3)
Dilution	WB~~WB 1:500-2000, ELISA 1:10000-20000 E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

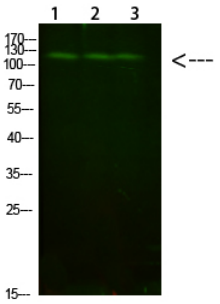
Name	FIG4 (HGNC:16873)
Function	Dual specificity phosphatase component of the PI(3,5)P2 regulatory complex which regulates both the synthesis and turnover of phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2) (PubMed:17556371, PubMed:33098764). Catalyzes the dephosphorylation of phosphatidylinositol 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

Background

The PI(3,5)P2 regulatory complex regulates both the synthesis and turnover of phosphatidylinositol

3,5-bisphosphate (PtdIns(3,5)P2). In vitro, hydrolyzes all three D5-phosphorylated polyphosphoinositide substrates in the order PtdIns(4,5)P2 > PtdIns(3,5)P2 > PtdIns(3,4,5)P3. Plays a role in the biogenesis of endosome carrier vesicles (ECV) / multivesicular bodies (MVB) transport intermediates from early endosomes.

Images



Western Blot analysis of 1,mouse-liver 2,hela 3,mouse-brain cells using primary antibody diluted at 1:1000(4°C overnight). Secondary antibody：Goat Anti-rabbit IgG IRDye 800(diluted at 1:5000, 25°C, 1 hour)