ELK Biotechnology

ACAP1 (phospho Ser554) rabbit pAb

Cat No.:ES8095

For research use only

Overview

Product Name	ACAP1 (phospho Ser554) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Rat;Mouse;
Recommended dilutions	Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human Centaurin-beta1 around the phosphorylation site of Ser554. AA range:520-569
Specificity	Phospho-ACAP1 (S554) Polyclonal Antibody detects endogenous levels of ACAP1 protein only when phosphorylated at S554.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Arf-GAP with coiled-coil ANK repeat and PH domain-containing protein 1
Gene Name	ACAP1
Cellular localization	Recycling endosome membrane ; Peripheral membrane protein ; Cytoplasmic side .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	
Human Gene ID	9744
Human Swiss-Prot Number	Q15027
Alternative Names	ACAP1; CENTB1; KIAA0050; Arf-GAP with coiled-coil; ANK repeat and PH domain-containing protein 1; Centaurin-beta-1; Cnt-b1
Background	domain:PH domain binds phospholipids including

phosphatidic acid, phosphatidylinositol 3-phosphate, phosphatidylinositol 3,5-bisphosphate (PIP2) and phosphatidylinositol 3,4,5-trisphosphate (PIP3). May mediate ACAP1-binding to PIP2 or PIP3 containing membranes.,enzyme regulation:GAP activity stimulated by phosphatidylinositol 4,5-bisphosphate (PIP2) and phosphatidic acid.,function:GTPase-activating protein (GAP) for ADP ribosylation factor 6 (ARF6) required for clathrin-dependent export of proteins from recycling endosomes to trans-Golgi network and cell surface.,miscellaneous:Cells overexpressing ACAP1 show an accumulation of ITGB1 in recycling endosomes and inhibition of stimulation-dependent cell migration. Cells with reduced levels of ACAP1 or AKT1 and AKT2 show inhibition of stimulation-dependent cell migration. Cells overexpressing ACAP1 and PIP5K1C show formation of tubular structures derived from endosomal membranes.,PTM:Phosphorylation at Ser-554 by PKB is required for interaction with ITGB1, export of ITGB1 from recycling endosomes to the cell surface and ITGB1-dependent cell migration.,similarity:Contains 1 Arf-GAP domain.,similarity:Contains 1 BAR domain.,similarity:Contains 1 PH domain.,similarity:Contains 3 ANK repeats.,subunit:Interacts with GTP-bound ARF6. Interacts with third cytoplasmic loop of SLC2A4/GLUT4. Interacts with CLTC. Interacts with GULP1. Forms a complex with GDP-bound ARF6 and GULP1.,tissue specificity:Highest level in lung and spleen. Low level in heart, kidney, liver and pancreas.,

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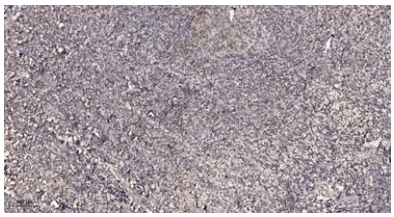
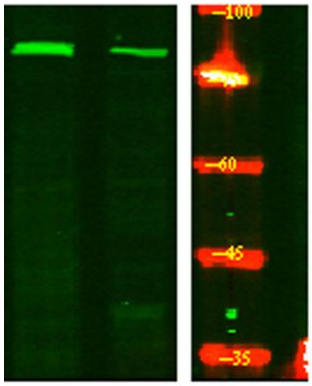


Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



Western Blot analysis of Hela treated or untreated by LPS lysis, using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000

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