



## ACAP1 (phospho Ser554) rabbit pAb

Cat#: orb770970 (Manual)

For research use only. Not intended for diagnostic use.

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-beta 1 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** 

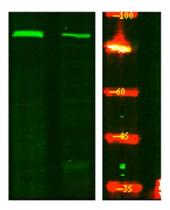
domain:PH domain binds phospholipids including phosphatidic acid, phosphatidylinositol 3-phosphate, phosphatidylinositol 3,5-bisphosphate (PIP2) and phosphatidylinositol 3,4,5-trisphosphate (PIP3). May mediate ACAP1-binding to PIP2 or PIP3 containing membranes.,enzyme regulation:GAP activity stimulated 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.,



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  $1:\!10000$