ACAP1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	ACAP1, Polyclonal Antibody
Full Product Name	ACAP1 Conjugated Antibody
Product Gene Name	anti-ACAP1 antibody
Product Synonym Names	CENTB1
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Specificity	The antibody detects endogenous levels of total ACAP1 protein.
Preparation and Storage	Store at 4 degree C for 6 months.
Molecular Weight	81,536 Da
OMIM	607763
3D Structure	ModBase 3D Structure for Q15027
Immunogen	Synthetic protein corresponding to residues near the C terminal of human ACAP1
Conjugation	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Excitation Emission	AF350: 346nm/442nm
Applications Tested/Suitable for anti-ACAP1 antibody	Most Applications
Application Notes for anti-ACAP1 antibody	Suggested Dilution: AF350 conjugated: most applications: 1:50-1:250 AF405 conjugated: most applications: 1:50-1:250 AF488 conjugated: most applications: 1:50-1:250 AF555 conjugated: most applications: 1:50-1:250 AF594 conjugated: most applications: 1:50-1:250 AF647 conjugated: most applications: 1:50-1:250 AF680 conjugated: most applications: 1:50-1:250 AF750 conjugated: most applications: 1:50-1:250 Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1:50-1:1000
Related Product Information for anti-ACAP1 antibody	ACAP1, also designated Centaurin- 1 (CENTB1 or Cnt-1), is a member of the ADP ribosylation factor family of ARF6 GTPase-activating proteins (GAP). GAPs are important regulators of Arf function by controlling the return of ARF to its inactive state. ACAP1 is related to AGAP1 and ASAP1, and all three proteins are similarly expressed in fibroblast cells such as NIH/3T3. Internalization and recycling of integrin receptors is important in cell adhesion and migration modulation, and once inside a cell, proteins and membranes are transported to the endosome where they are sorted for recycling or degradation. ACAP1 promotes cargo sorting by associating directly to recycling cargo proteins. Preventing this interaction inhibits protein recycling. ACAP1 binds transferrin receptors, promoting their transport to the plasma membrane from the endosome. Akt induced phosphorylation of ACAP1 at Ser 554 regulates ACAP1 interaction to integrin in endosomes, and downregulation of Akt or ACAP1 may inhibit cell migration on Fibronectin.

Other Notes	Small volumes of anti-ACAP1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for ACAP1 purchase	MBS9454253 is an antibody targeting ACAP1. Also known as ACAP1 Conjugated Antibody. Reactive in Human, Mouse. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ACAP1. It may not necessarily be applicable to this product.

NCBI GI #	17391288
NCBI GeneID	9744
NCBI Accession #	BC018543
UniProt Primary Accession #	Q15027
UniProt Secondary Accession #	Q53XN9
UniProt Related Accession #	Q15027
NCBI Official Full Name	Homo sapiens ArfGAP with coiled-coil, ankyrin repeat and PH domains 1, mRNA
NCBI Official Synonym Full Names	ArfGAP with coiled-coil, ankyrin repeat and PH domains 1
NCBI Official Symbol	ACAP1
NCBI Official Synonym Symbols	CENTB1
UniProt Protein Name	Arf-GAP with coiled-coil, ANK repeat and PH domain-containing protein 1
UniProt Synonym Protein Names	Centaurin-beta-1; Cnt-b1
Protein Family	Arf-GAP with coiled-coil, ANK repeat and PH domain-containing protein
UniProt Gene Name	ACAP1
UniProt Synonym Gene Names	CENTB1; KIAA0050; Cnt-b1
UniProt Entry Name	ACAP1_HUMAN
NCBI Protein Information	arf-GAP with coiled-coil, ANK repeat and PH domain-containing protein 1
UniProt Comments for ACAP1	CENTB1: a member of the centaurin family of ADP-ribosylation factor directed GTPase-activating proteins (GAPs). A GAP for ARF1 and ARF5. Two alternatively-spliced isoforms have been described. Isoform 1 is brain-specific, and isoform 2 is ubiquitously expressed, with highest levels in brain and heart. Isoform 1 participates to the prevention of neuronal apoptosis by enhancing PI3 kinase activity. It aids the coupling of metabotropic glutamate receptor 1 (GRM1) to cytoplasmic PI3 kinase by interacting with Homer scaffolding proteins, and also seems to mediate anti-apoptotic effects of NGF by activating nuclear PI3 kinase. Isoform 2 does not stimulate PI3 kinase but may protect cells from apoptosis by stimulating Akt. Regulates the adapter protein 1 (AP-1)-dependent trafficking of proteins in the endosomal system. The PH domains of isoforms 1 and 2 bind phospholipids, but they differentially regulate subcellular location. The PH domain of isoform 1 directs the protein to the nucleus, but the PH domain of isoform 2 directs it to the cytosol. Protein type: Motility/polarity/chemotaxis; GAPs, ARF; GAPs Chromosomal Location of Human Ortholog: 17p13.1 Cellular Component: membrane; recycling endosome membrane Molecular Function: zinc ion binding Biological Process: protein transport; positive regulation of GTPase activity
Research Articles on ACAP1	**1.** The serum lever of Alzheimer's disease were decrease and the expression of ACAP1 strongly correlated with the Mini-Mental State Examination scores of the AD patients

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-antibody/acap1/9454253