

Centaurin alpha 1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54539**Specification**

Centaurin alpha 1 Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	O75689
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Centaurin alpha 1
Epitope Specificity	101-200/374
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cellular localizationCytoplasmic, Nuclear and Plasma membrane
SIMILARITY	Contains 1 Arf-GAP domain. Contains 2 PH domains.
SUBUNIT	Interacts with PRKCA, PRKCI and PRKCZ. Interacts with the N-terminal region of PRKD1.
Post-translational modifications	Phosphorylated by PRKCA, PRKCI, PRKCZ and PRKD1 in vitro.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

ADP-ribosylation factor (ARF) family of small GTP-binding proteins are involved in vesicular transport regulation and in controlling cytoskeletal organization and cell adhesion. These proteins are best characterized as regulators of membrane traffic. The Centaurin GTPase-activating protein family comprise a subset of ARF regulatory molecules that transduce PI 3-kinase activation into coordinated control of Arf-dependent pathways. This family includes ASAP1, ACAP1, ACAP2, AGAP1, ARAP1, ARAP2, Centaurin a1 and Centaurin g3. The Centaurin a1 protein is a high affinity PtdIns(3,4,5)P3 binding protein enriched in brain. By acting as a GTPase activating protein for ADP ribosylation factor 6 (ARF6), Centaurin a1 is able to switch off ARF6 and inhibit its ability to mediate b2-adrenoceptor internalization and negatively regulate ARF6 activity by functioning as an in vivo PIP3 dependent ARF6 GAP.

Centaurin alpha 1 Polyclonal Antibody - Additional Information

Gene ID 11033

Other Names

Arf-GAP with dual PH domain-containing protein 1, Centaurin-alpha-1, Cnt-a1, Putative MAPK-activating protein PM25, ADAP1, CENTA1

Target/Specificity

Expressed at highest levels in brain and at lower levels in peripheral blood leukocytes.

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Centaurin alpha 1 Polyclonal Antibody - Protein Information

Name ADAP1

Synonyms CENTA1

Function

GTPase-activating protein for the ADP ribosylation factor family (Probable). Binds phosphatidylinositol 3,4,5-trisphosphate (PtdInsP3) and inositol 1,3,4,5-tetrakisphosphate (InsP4). Regulates the incorporation of CD63 and CD9 into multivesicular bodies (PubMed:38682696).

Cellular Location

Nucleus. Cytoplasm. Note=Recruited to the plasma membrane upon epidermal growth factor-dependent activation of phosphatidylinositol 4,5-diphosphate (PtdInsP2) 3-kinase

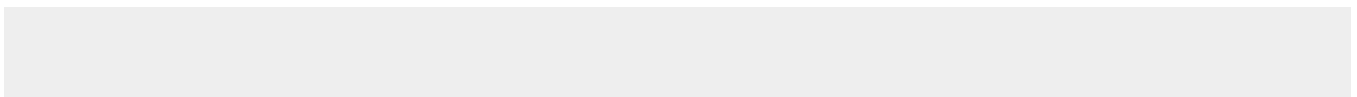
Tissue Location

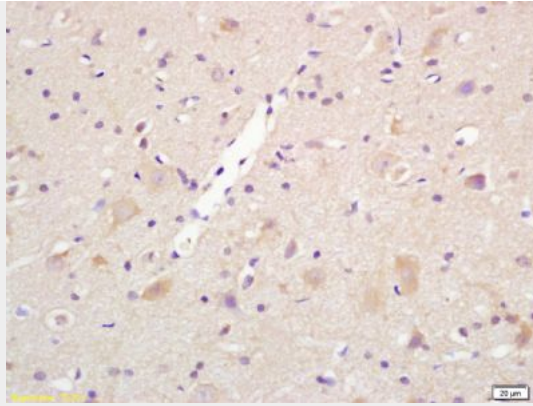
Expressed at highest levels in brain and at lower levels in peripheral blood leukocytes.

Centaurin alpha 1 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Centaurin alpha 1 Polyclonal Antibody - Images



Tissue/cell: Rat brain ; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Centaurin alpha 1 Polyclonal Antibody, Unconjugated(bs-11543R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining