

Anti-AGAP2 (RABBIT) Antibody AGAP2 Antibody Catalog # ASR4413

Specification

Anti-AGAP2 (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Human Human, Mouse Polyclonal WB, E, I, LCI This protein A purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 90 kDa in size corresponding to AGAP2 protein by western blotting in the appropriate cell lysate or extract.
Physical State Buffer	Lyophilized 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This protein A purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a recombinant protein corresponding to amino acids 1-836 of human AGAP2 protein.
Reconstitution Volume	100 μL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Preservative	0.01% (w/v) Sodium Azide

Anti-AGAP2 (RABBIT) Antibody - Additional Information

Gene ID 116986

Other Names 116986

Purity

This protein A purified antibody is directed against human AGAP2 protein. The product was purified from monospecific antiserum by protein A chromatography. A BLAST analysis was used to suggest cross reactivity with AGAP2 protein from mouse and rat based on 93% and 95% protein:protein homologies, respectively, with the immunizing sequence. Reactivity against homologues from other sources is not known.

Storage Condition

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C



or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-AGAP2 (RABBIT) Antibody - Protein Information

Name AGAP2

Synonyms CENTG1, KIAA0167

Function

GTPase-activating protein (GAP) for ARF1 and ARF5, which also shows strong GTPase activity. Isoform 1 participates in 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. It also regulates the adapter protein 1 (AP-1)-dependent trafficking of proteins in the endosomal system. It seems to be oncogenic. It is overexpressed in cancer cells, prevents apoptosis and promotes cancer cell invasion.

Cellular Location [Isoform 1]: Cytoplasm. Nucleus.

Tissue Location

Isoform 1 is brain-specific. Isoform 2 is ubiquitously expressed, with highest levels in brain and heart

Anti-AGAP2 (RABBIT) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-AGAP2 (RABBIT) Antibody - Images





Western blot using Rockland's Protein A purified anti-AGAP2 antibody shows detection of AGAP2 recombinant protein in transfected HEK293 cell lysates. No specific band staining is noted in mock transfected cell lysates (empty vector). The membrane was probed with the primary antibody diluted to 1:10,000. Personal Communication, Paul Randazzo, CCR-NCI, Bethesda, MD.

Anti-AGAP2 (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI). AGAP2 (also known as Arf-GAP with GTPase, ANK repeat and PH domain-containing protein 2) is a GTPase activating protein that inactivates Arf. The expression of AGAP2 is amplified in human glioblastoma cells. GTPase-activating protein (GAP) for ARF1 and ARF5, which also shows strong GTPase activity. It mediates anti-apoptotic effects of nerve growth factor by activating nuclear phosphoinositide 3-kinase. Isoform 1 participates in 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 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. It also regulates the adapter protein 1 (AP-1)-dependent trafficking of proteins in the endosomal system. It seems to be oncogenic. It is overexpressed in cancer cells, prevents apoptosis and promotes cancer cell invasion. Anti-AGAP2 Antibody is useful for researchers interested in Developmental Biology, apoptosis, Cancer, Immunology, and Nuclear Signaling research.