

AGAP2 / PIKE Antibody (Internal) Goat Polyclonal Antibody Catalog # ALS13368

Specification

AGAP2 / PIKE Antibody (Internal) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, E <u>O99490</u> Human Goat Polyclonal 125kDa KDa WB~~1:1000 IHC-P~~N/A E~~N/A

AGAP2 / PIKE Antibody (Internal) - Additional Information

Gene ID 116986

Other Names Arf-GAP with GTPase, ANK repeat and PH domain-containing protein 2, AGAP-2, Centaurin-gamma-1, Cnt-g1, GTP-binding and GTPase-activating protein 2, GGAP2, Phosphatidylinositol 3-kinase enhancer, PIKE, AGAP2, CENTG1, KIAA0167

Target/Specificity Human AGAP2 / PIKE. This antibody is expected to recognize isoform PIKE-S (NP_055585.1).

Reconstitution & Storage Store at -20°C. Minimize freezing and thawing.

Precautions AGAP2 / PIKE Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

AGAP2 / PIKE Antibody (Internal) - 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

AGAP2 / PIKE Antibody (Internal) - Protocols

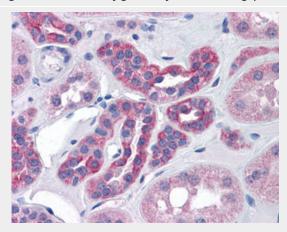
Provided below are standard protocols that you may find useful for product applications.

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

AGAP2 / PIKE Antibody (Internal) - Images



Antibody (0.3 ug/ml) staining of Human Amygdala lysate (35 ug protein in RIPA buffer).



Anti-AGAP2 / PIKE antibody IHC of human kidney.



AGAP2 / PIKE Antibody (Internal) - Background

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.

AGAP2 / PIKE Antibody (Internal) - References

Elkahloun A.G., et al. Genomics 42:295-301(1997). Roe B., et al. Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases. Xia C., et al. Mol. Cell. Biol. 23:2476-2488(2003). Rong R., et al. Nat. Neurosci. 6:1153-1161(2003). Hong W., et al. Submitted (AUG-2001) to the EMBL/GenBank/DDBJ databases.