

### AGAP2 / PIKE Antibody (Internal)

Goat Polyclonal Antibody Catalog # ALS13368

### **Specification**

### AGAP2 / PIKE Antibody (Internal) - Product Information

Application WB, IHC
Primary Accession O99490
Reactivity Human
Host Goat
Clonality Polyclonal
Calculated MW 125kDa KDa

# 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

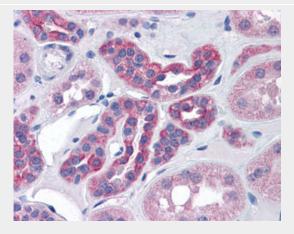
Provided below are standard protocols that you may find useful for product applications.

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

## AGAP2 / PIKE Antibody (Internal) - Images

250kDa 150kDa 75kDa 50kDa 37kDa 25kDa 20kDa

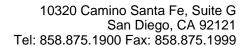
Antibody (0.3 ug/ml) staining of Human Amygdala lysate (35 ug protein in RIPA buffer).



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.