

### AGAP2 / PIKE Antibody (C-Terminus)

**Rabbit Polyclonal Antibody** Catalog # ALS11263

### **Specification**

## AGAP2 / PIKE Antibody (C-Terminus) - Product Information

**IHC** Application **Primary Accession** 099490

Reactivity Human, Mouse Host **Rabbit** Clonality **Polyclonal** Calculated MW

### AGAP2 / PIKE Antibody (C-Terminus) - 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

Anti-PIKE antibody will detect both PIKE-L and PIKE-A isoforms.

### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

125kDa KDa

#### **Precautions**

AGAP2 / PIKE Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

#### AGAP2 / PIKE Antibody (C-Terminus) - 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**

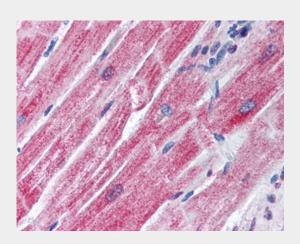
Isoform 1 is brain-specific. Isoform 2 is ubiquitously expressed, with highest levels in brain and heart

## AGAP2 / PIKE Antibody (C-Terminus) - Protocols

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

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

## AGAP2 / PIKE Antibody (C-Terminus) - Images



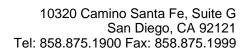
Anti-AGAP2 / PIKE antibody IHC of human heart.

# AGAP2 / PIKE Antibody (C-Terminus) - 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 (C-Terminus) - 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.