

# Goat Anti-CENTG1 / PIKE Antibody

Peptide-affinity purified goat antibody Catalog # AF1230a

# **Specification**

# **Goat Anti-CENTG1 / PIKE Antibody - Product Information**

Application WB
Primary Accession O99490

Other Accession <u>NP\_055585</u>, <u>116986</u>

Reactivity
Host
Clonality
Concentration
Isotype
Human
Goat
Polyclonal
100ug/200ul
Isotype
InG

Isotype IgG
Calculated MW 124674

# **Goat Anti-CENTG1 / PIKE Antibody - 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

### **Format**

0.5~mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

# **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

Goat Anti-CENTG1 / PIKE Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Goat Anti-CENTG1 / PIKE 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**

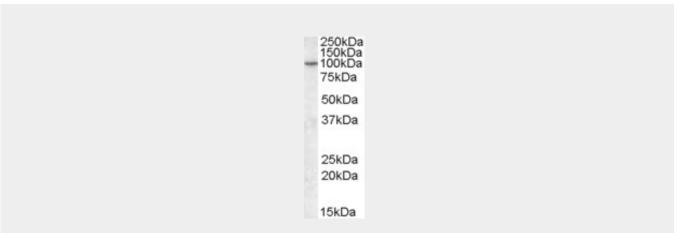
Isoform 1 is brain-specific. Isoform 2 is ubiquitously expressed, with highest levels in brain and heart

# Goat Anti-CENTG1 / PIKE Antibody - 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

# Goat Anti-CENTG1 / PIKE Antibody - Images



AF1230a (0.3  $\mu$ g/ml) staining of Human Amygdala lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

# Goat Anti-CENTG1 / PIKE Antibody - References

Arf GTPase-activating protein AGAP2 regulates focal adhesion kinase activity and focal adhesion remodeling. Zhu Y, et al. J Biol Chem, 2009 May 15. PMID 19318351.

GGAP2/PIKE-a directly activates both the Akt and nuclear factor-kappaB pathways and promotes prostate cancer progression. Cai Y, et al. Cancer Res, 2009 Feb 1. PMID 19176382.

Cdk5-mediated regulation of the PIKE-A-Akt pathway and glioblastoma cell invasion. Liu R, et al. Proc Natl Acad Sci U S A, 2008 May 27. PMID 18487454.

Netrin-1 mediates neuronal survival through PIKE-L interaction with the dependence receptor UNC5B. Tang X, et al. Nat Cell Biol, 2008 Jun. PMID 18469807.

Neuroprotective actions of PIKE-L by inhibition of SET proteolytic degradation by asparagine





endopeptidase. Liu Z, et al. Mol Cell, 2008 Mar 28. PMID 18374643.