

# CENTG1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10947b

## **Product Information**

Application	WB, E
Primary Accession	<u>Q99490</u>
Other Accession	<u>Q8CGU4, Q3UHD9, NP_001116244.1, NP_055585.1</u>
Reactivity	Human, Rat, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19565
Calculated MW	124591
Antigen Region	850-877

#### **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	This CENTG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 850-877 amino acids from the C-terminal region of human CENTG1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CENTG1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **Protein Information**

Name

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

## 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.

### References

Shiba, Y., et al. J. Cell. Sci. 123 (PT 14), 2381-2390 (2010) : Zhu, Y., et al. J. Biol. Chem. 284(20):13489-13496(2009) Cai, Y., et al. Cancer Res. 69(3):819-827(2009) Tang, X., et al. Nat. Cell Biol. 10(6):698-706(2008) Liu, R., et al. Proc. Natl. Acad. Sci. U.S.A. 105(21):7570-7575(2008)

#### Images



All lanes : Anti-CENTG1 Antibody (C-term) at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: U-2 OS whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 125 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

CENTG1 Antibody (C-term) (Cat. #AP10947b) western blot analysis in mouse brain tissue lysates (35ug/lane).This demonstrates the CENTG1 antibody detected the CENTG1 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.