

### **RGS4 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8879c

## **Specification**

## **RGS4 Antibody (Center) - Product Information**

Application WB,E
Primary Accession P49798

Other Accession P49799, Q0R4E4, Q4R525, Q29RM9

Reactivity Human, Mouse

Predicted Bovine, Monkey, Rabbit, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 147-174

## **RGS4 Antibody (Center) - Additional Information**

### **Gene ID 5999**

### **Other Names**

Regulator of G-protein signaling 4, RGP4, RGS4, RGS4

### Target/Specificity

This RGS4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 147-174 amino acids from the Central region of human RGS4.

# **Dilution**

WB~~1:1000

## **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**

RGS4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **RGS4 Antibody (Center) - Protein Information**

## Name RGS4

**Function** Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits thereby driving them into their inactive GDP-bound form. Activity on G(z)-alpha is inhibited by





phosphorylation of the G-protein. Activity on G(z)-alpha and G(i)- alpha-1 is inhibited by palmitoylation of the G-protein.

### **Tissue Location**

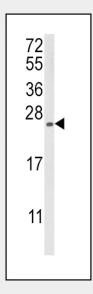
Expressed in brain and heart. Expressed in brain at protein level. Expressed in prefontal and visual cortex. Isoform 4 and isoform 5 are expressed ubiquitously. Isoform 1, isoform 2 and isoform 3 are not expressed in the cerebellum.

## **RGS4 Antibody (Center) - Protocols**

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

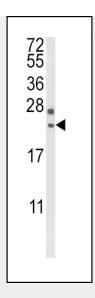
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **RGS4 Antibody (Center) - Images**

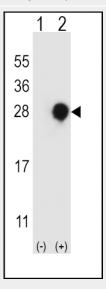


Western blot analysis of RGS4 Antibody (Center) (Cat. #AP8879c) in MDA-MB231 cell line lysates (35ug/lane). RGS4 (arrow) was detected using the purified Pab.





Western blot analysis of RGS4 Antibody (Center) (Cat. #AP8879c) in mouse brain tissue lysates (35ug/lane). RGS4 (arrow) was detected using the purified Pab.



Western blot analysis of RGS4 (arrow) using rabbit polyclonal RGS4 Antibody (Center) (Cat. #AP8879c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the RGS4 gene.

## **RGS4 Antibody (Center) - Background**

Regulator of G protein signaling (RGS) family members are regulatory molecules that act as GTPase activating proteins (GAPs) for G alpha subunits of heterotrimeric G proteins. RGS proteins are able to deactivate G protein subunits of the Gi alpha, Go alpha and Gq alpha subtypes. They drive G proteins into their inactive GDP-bound forms. Regulator of G protein signaling 4 belongs to this family. All RGS proteins share a conserved 120-amino acid sequence termed the RGS domain. Regulator of G protein signaling 4 protein is 37% identical to RGS1 and 97% identical to rat Rgs4. This protein negatively regulate signaling upstream or at the level of the heterotrimeric G protein and is localized in the cytoplasm.

# **RGS4 Antibody (Center) - References**

Heximer, S.P., et.al., Proc. Natl. Acad. Sci. U.S.A. 94 (26), 14389-14393 (1997)