

## **RGS4 Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP8879c

### **Specification**

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

Primary Accession

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

**Gene ID 5999** 

#### **Other Names**

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

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP8879c>AP8879c</a> was selected from the Center region of human RGS4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

P49798

### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

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

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

### Blocking Peptides

**RGS4 Antibody (Center) Blocking Peptide - Images** 

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

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