10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RGS4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8879c

Product Information

Application	WB, E
Primary Accession	P49798
Other Accession	P49799, Q0R4E4, Q4R525, Q29RM9
Reactivity	Human, Mouse
Predicted	Bovine, Monkey, Rabbit, Rat, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21256
Calculated MW	23256
Antigen Region	147-174

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

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.

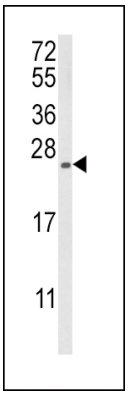
Background

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.

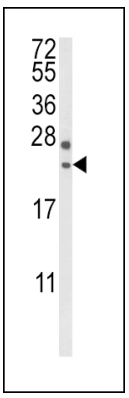
References

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

Images

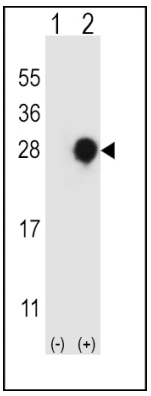


Western blot analysis of RGS4 Antibody (Center) (Cat. #AP8879c) in MDA-MB231 cell line lysates (35ug/lane). RGS4 (arrow) was detected using the purified Pab.



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.



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