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

RGS20 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20629c

Product Information

Application	WB, E
Primary Accession	O76081
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB49337
Calculated MW	43692

Additional Information

Gene ID	8601
Other Names	Regulator of G-protein signaling 20, RGS20, Gz-selective GTPase-activating protein, G(z)GAP, Gz-GAP, Regulator of G-protein signaling Z1, Regulator of Gz-selective protein signaling 1, RGS20, RGSZ1, ZGAP1
Target/Specificity	This RGS20 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 150-184 amino acids from the Central region of human RGS20.
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	RGS20 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RGS20
Synonyms	RGSZ1, ZGAP1
Function	Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits thereby driving them into their inactive GDP-bound form.

	Binds selectively to G(z)-alpha and G(alpha)- i2 subunits, accelerates their GTPase activity and regulates their signaling activities. The G(z)-alpha activity is inhibited by the phosphorylation and palmitoylation of the G-protein. Negatively regulates mu-opioid receptor-mediated activation of the G-proteins (By similarity).
Cellular Location	Membrane; Lipid-anchor. Nucleus. Cytoplasm. Note=Shuttles between the cytoplasm/cell membrane and the nucleus Anchored to the membrane through palmitoylation.
Tissue Location	Isoform 5 is expressed in brain at high levels in the caudate nucleus and temporal lobe

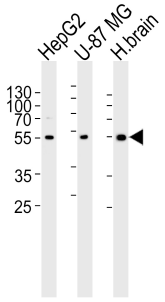
Background

Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits thereby driving them into their inactive GDP-bound form. Binds selectively to G(z)-alpha and G(alpha)-i2 subunits, accelerates their GTPase activity and regulates their signaling activities. The G(z)-alpha activity is inhibited by the phosphorylation and palmitoylation of the G- protein. Negatively regulates mu-opioid receptor-mediated activation of the G-proteins (By similarity).

References

Wang J.,et al.J. Biol. Chem. 273:26014-26025(1998).
Wang J.,et al.Submitted (APR-2001) to the EMBL/GenBank/DDBJ databases.
Barker S.A.,et al.Genomics 78:223-229(2001).
Puhl H.L. III,et al.Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
Glick J.L.,et al.J. Biol. Chem. 273:26008-26013(1998).

Images



Western blot analysis of lysates from HepG2, U-87 MG cell line and human brain tissue lysate(from left to right), using RGS20 Antibody (Center)(Cat. #AP20629c). AP20629c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.