

RGS20 Rabbit pAb

Catalog # AP98416

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O76081
Other Accession	O76081
Reactivity	Rat
Predicted	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43692
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RGS20
Epitope Specificity	201-300/388
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 RGS domain.
Post-translational modifications	Fatty acylated. Heavily palmitoylated in the cysteine string motif. N- and O-glycosylated in synapsomal membranes. Serine phosphorylated in synapsomal membranes. Sumoylated by SUMO1 and SUMO2 in synaptosomes. The sumoylated forms act as a scaffold for sequestering mu-opioid receptor-activated G(alpha) subunits.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene belongs to the family of regulator of G protein signaling (RGS) proteins, which are regulatory and structural components of G protein-coupled receptor complexes. RGS proteins inhibit signal transduction by increasing the GTPase activity of G protein alpha subunits, thereby driving them into their inactive GDP-bound forms. This protein selectively binds to G(z)-alpha and G(alpha)-i2 subunits, and regulates their signaling activities. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]

Additional Information

Gene ID	8601
Other Names	RGSZ1; ZGAP1; g(z)GAP; gz-GAP; 2900073E09Rik; RGS20_HUMAN; 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_MOUSE; regulator of G protein signaling 20; regulator of G-protein signalling 20; regulator of G-protein signaling 20
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
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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

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