



## Rabbit Anti-RGS20 antibody

SL20516R

<b>Product Name:</b>	RGS20
<b>Chinese Name:</b>	G protein signal转导调节因子20抗体
<b>Alias:</b>	G(z)GAP; Gz selective GTPase activating protein; Gz-GAP; Gz-selective GTPase-activating protein; HGNC:14600; Regulator of G protein signaling 20; Regulator of G-protein signaling 20; Regulator of G-protein signaling Z1; Regulator of Gz selective protein signaling 1; Regulator of Gz-selective protein signaling 1; RGS20; RGS20 HUMAN; RGSZ1; ZGAP1.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	44kDa
<b>Cellular localization:</b>	The nucleuscytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human RGS20:201-300/388
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	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]

**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.

**Subcellular Location:**

Membrane. Nucleus. Cytoplasm. Shuttles between the cytoplasm/cell membrane and the nucleus (By similarity). Anchored to the membrane through palmitoylation.

**Tissue Specificity:**

Isoform 5 is expressed in brain at high levels in the caudate nucleus and temporal lobe.

**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.

**Similarity:**

Contains 1 RGS domain.

**SWISS:**

O76081

**Gene ID:**

8601

**Database links:**

[Entrez Gene: 8601](#)Human

[Entrez Gene: 58175](#)Mouse

[Omim: 607193](#)Human

[SwissProt: O76081](#)Human

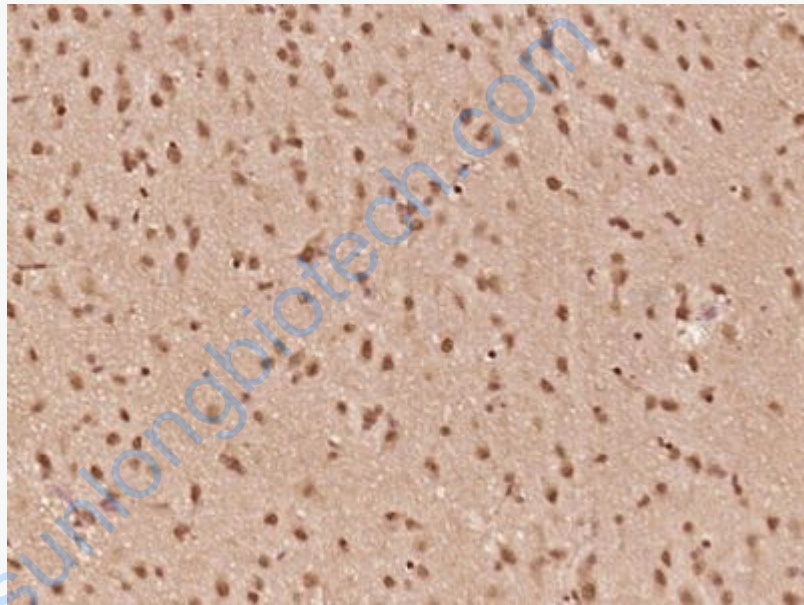
[SwissProt: Q9QZB1](#)Mouse

[Unigene: 368733](#)Human

[Unigene: 103771](#)Mouse

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (RGS20) Polyclonal Antibody, Unconjugated (SL20516R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.