

# Rabbit Anti-RGS17 antibody

## SL19857R

<b>Product Name:</b>	RGS17
Chinese Name:	G protein signal转导调节 <b>因子17抗体</b>
Alias:	Regulator of G protein signalling 17; RGS17 / RGSZ2; Regulator of G protein signalling
	Z2; Regulator of G-protein signaling 17; RGS17; RGS17_HUMAN; RGSZ2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Guinea Pig,
Applications:	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.
Molecular weight:	24kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human RGS17:131-210/210
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	<u>PubMed</u>
Product Detail:	This gene encodes a member of the regulator of G-protein signaling family. This protein
	contains a conserved, 120 amino acid motif called the RGS domain and a cysteine-rich
	region. The protein attenuates the signaling activity of G-proteins by binding to
	activated, GTP-bound G alpha subunits and acting as a GTPase activating protein
	(GAP), increasing the rate of conversion of the GTP to GDP. This hydrolysis allows the
	G alpha subunits to bind G beta/gamma subunit heterodimers, forming inactive G-

protein heterotrimers, thereby terminating the signal. [provided by RefSeq, Jul 2008]

#### **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. Anchored to the membrane through palmitoylation.

### Tissue Specificity:

Predominantly expressed in the cerebellum. Also expressed in the cortex and medulla. Weakly expressed in a number of peripheral tissues notably spleen, lung and leukocytes.

#### **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 SUM02 in synaptosomes. The sumoylated forms act as a scaffold for sequestering mu-opioid receptor-activated G(alpha) subunits.

#### Similarity:

Contains 1 RGS domain.

# SWISS:

Q9UGC6

# Gene ID:

504255

#### Database links:

Entrez Gene: 504255 Cow

Entrez Gene: 608867 Dog

Entrez Gene: 100712640 Guinea pig

Entrez Gene: 100060098 Horse

Entrez Gene: 26575 Human

Entrez Gene: 56533 Mouse

Entrez Gene: 100514020 Pig

Entrez Gene: 100349762 Rabbit

Entrez Gene: 308118 Rat

Omim: 607191 Human

SwissProt: Q9UGC6 Human

SwissProt: Q9QZB0 Mouse

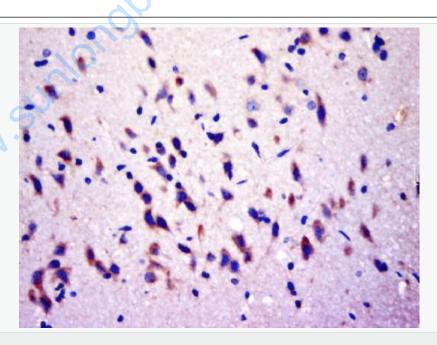
Unigene: 166313 Human

Unigene: 44606 Mouse

<u>Unigene: 166916</u> Rat

### Important Note:

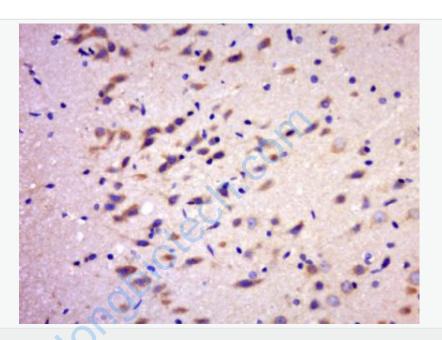
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#### Picture:

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 (RGS17) Polyclonal Antibody, Unconjugated (SL19857R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining



Tissue/cell: Rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-RGS17 Polyclonal Antibody, Unconjugated(SL19857R) 1:400, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining