

Rabbit Anti-GNAL antibody

SL12003R

Product Name:	GNAL
Chinese Name:	- GINAL 腺苷酸环化酶Gα蛋白/Gαs/olf抗体
Chinese Name:	
Alias:	Adenylate cyclase stimulating G alpha protein, olfactory type; Adenylate cyclase stimulating G alpha protein, olfactory type; Adenylate cyclase-stimulating G alpha protein; Gnal; GNAL_HUMAN; Guanine nucleotide binding protein (G protein), alpha activating activity polypeptide, olfactory type; Guanine nucleotide binding protein (G protein), alpha stimulating activity polypeptide, olfactory type; Guanine nucleotide binding protein G(olf) subunit alpha; Guanine nucleotide-binding protein G(olf) subunit alpha; olfactory type.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Cow, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=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:	44kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GNAL:21-130/381
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:	PubMed
Product Detail:	Heterotrimeric G proteins function to relay information from cell surface receptors to

intracellular effectors (1). Each of a very broad range of receptors specifically detects an extracellular stimulus (a photon, pheromone, odorant, hormone or neurotransmitter) while the effectors (e.g., adenyl cyclase), which act to generate one or more intracellular messengers, are less numerous. In mammals, G protein alpha, beta and gamma polypeptides are encoded by at least 16, 4 and 7 genes, respectively (2-5). Most interest in G proteins has been focused on their alpha subunits, since these proteins bind and hydrolyze GTP and most obviously regulate the activity of the best studied effectors. More recent evidence, however, has established an important regulatory role for the beta gamma subunits (6-8). The Gs subfamily of G alpha subunits includes two closely related proteins, Ga s and Ga olf, which respectively stimulate adenylate cyclase and mediate response to olfactory stimuli (9).

Function:

Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. G(olf) alpha mediates signal transduction within the olfactory neuroepithelium and the basal ganglia. May be involved in some aspect of visual transduction, and in mediating the effect of one or more hormones/neurotransmitters.

Subunit:

G proteins are composed of 3 units; alpha, beta and gamma. The alpha chain contains the guanine nucleotide binding site.

Tissue Specificity:

Detected in olfactory neuroepithelium, brain, testis, and to a lower extent in retina, lung alveoli, spleen. Trace amounts where seen in kidney, adrenal gland and liver. Found to be expressed in all the insulinomas examined.

Similarity:

Belongs to the G-alpha family. G(s) subfamily.

SWISS:

P38405

Gene ID: 2774

Database links:

Entrez Gene: 2774Human

Entrez Gene: 14680Mouse

Entrez Gene: 24611Rat

<u>Omim: 139312</u>Human

SwissProt: P38405Human
SwissProt: Q8CGK7Mouse
SwissProt: P38406Rat
Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.