

RGS19 Antibody (S24)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1820d

Specification

RGS19 Antibody (S24) - Product Information

Application Primary Accession	WB, IHC-P,E <u>P49795</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	24636
Antigen Region	9-39

RGS19 Antibody (S24) - Additional Information

Gene ID 10287

Other Names

Regulator of G-protein signaling 19, RGS19, G-alpha-interacting protein, GAIP, RGS19, GAIP, GNAI3IP

Target/Specificity

This RGS19 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 9~39 amino acids surrounding S24 of human RGS19.

Dilution WB~~1:1000 IHC-P~~1:10~50

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

RGS19 Antibody (S24) is for research use only and not for use in diagnostic or therapeutic procedures.

RGS19 Antibody (S24) - Protein Information

Name RGS19

Synonyms GAIP, GNAI3IP



Function Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits thereby driving them into their inactive GDP-bound form. Binds to G-alpha subfamily 1 members, with the order G(i)a3 > G(i)a1 > G(o)a >> G(z)a/G(i)a2. Activity on G(z)-alpha is inhibited by phosphorylation and palmitoylation of the G-protein.

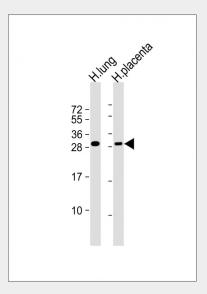
Cellular Location Membrane; Lipid-anchor.

Tissue Location Highest expression in lung. Placenta, liver and heart also express high levels of GAIP

RGS19 Antibody (S24) - Protocols

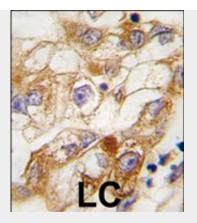
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- RGS19 Antibody (S24) Images



All lanes : Anti-RGS19 Antibody (S24) at 1:1000 dilution Lane 1: human lung lysate Lane 2: human placenta lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 25 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with RGS19 Antibody (S24) (Cat.#AP1820d), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

RGS19 Antibody (S24) - Background

RGS19 enhances the intrinsic GTPase-activating protein activity of the Galphai3 protein, which stimulates autophagy by favoring the GDP-bound form of Galphai3.

Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active cytoplasmic enzymes and organelles during nutrient starvation. Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole).

RGS19 Antibody (S24) - References

Baehrecke EH. Nat Rev Mol Cell Biol. 6(6):505-10. (2005) Lum JJ, et al. Nat Rev Mol Cell Biol. 6(6):439-48. (2005) Greenberg JT. Dev Cell. 8(6):799-801. (2005) Levine B. Cell. 120(2):159-62. (2005) Shintani T and Klionsky DJ. Science. 306(5698):990-5. (2004) de Vries L., et al. PNAS 93:15203-15208(1996) de Alba E., et al. J. Mol. Biol. 291:927-939(1999) Wang J., et al. J. Biol. Chem. 273:26014-26025(1998) Ogier-Denis E., et al. J. Biol. Chem. 275:39090-39095(2000)