

# RGS19 Antibody (S24)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP1820d

## Product Information

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|--------------------------|------------------------|
| <b>Application</b>       | IHC-P, WB, E           |
| <b>Primary Accession</b> | <a href="#">P49795</a> |
| <b>Reactivity</b>        | Human                  |
| <b>Host</b>              | Rabbit                 |
| <b>Clonality</b>         | Polyclonal             |
| <b>Isotype</b>           | Rabbit IgG             |
| <b>Clone Names</b>       | RB11889                |
| <b>Calculated MW</b>     | 24636                  |
| <b>Antigen Region</b>    | 9-39                   |

## Additional Information

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|---------------------------|--|
| <b>Gene ID</b>            | 10287  |
| <b>Other Names</b>        | Regulator of G-protein signaling 19, RGS19, G-alpha-interacting protein, GAIP, RGS19, GAIP, GNAI3IP  |
| <b>Target/Specificity</b> | This RGS19 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 9~39 amino acids surrounding S24 of human RGS19.                     |
| <b>Dilution</b>           | IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.  |
| <b>Format</b>             | 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. |
| <b>Storage</b>            | 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.                                      |
| <b>Precautions</b>        | RGS19 Antibody (S24) is for research use only and not for use in diagnostic or therapeutic procedures.   |

## Protein Information

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|-----------------|---|
| <b>Name</b>     | RGS19   |
| <b>Synonyms</b> | GAIP, GNAI3IP   |
| <b>Function</b> | 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

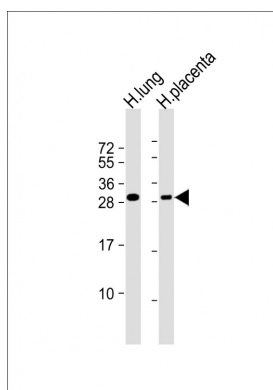
## Background

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).

## References

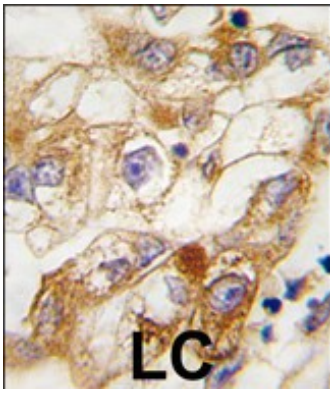
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## Images



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 IgG, (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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.