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RGS19 Antibody (S24)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1820d

Product Information

Application	IHC-P, WB, E
Primary Accession	P49795
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB11889
Calculated MW	24636
Antigen Region	9-39

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	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
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.

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

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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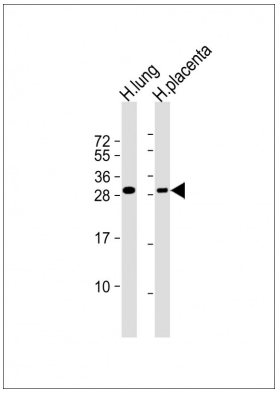
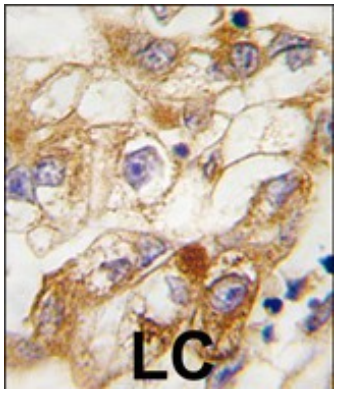
Images



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.



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