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RGS19 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1820a

Product Information

Application	IHC-P, WB, E
Primary Accession	P49795
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB7576
Calculated MW	24636
Antigen Region	1-30

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 1~30 amino acids from the N-term 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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 (N-term) 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

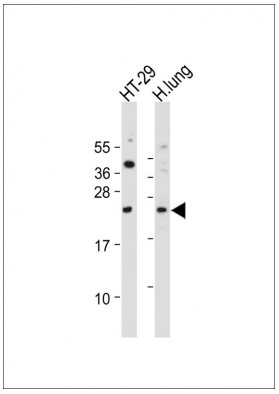
Background

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

References

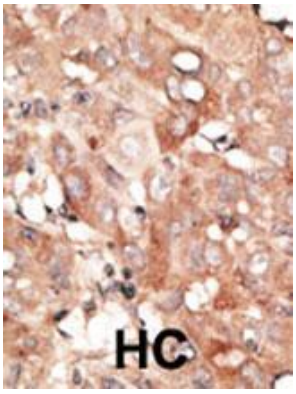
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Images



All lanes : Anti-RGS19-H5 at 1:2000 dilution Lane 1: HT-29 whole cell lysate Lane 2: Human lung tissue 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 cancer tissue reacted with the primary antibody, 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. BC = breast carcinoma; HC = hepatocarcinoma.



Citations

- Activation of autophagy in mesenchymal stem cells provides tumor stromal support.
- Gαi1 and Gαi3 regulate macrophage polarization by forming a complex containing CD14 and Gab1.

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