

### RGS19 Antibody (S151)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1820f

#### Specification

# **RGS19** Antibody (S151) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P,E <u>P49795</u> <u>O70521</u>, <u>O9CX84</u>, <u>O08DC7</u> Human, Mouse Bovine, Rat Rabbit Polyclonal Rabbit IgG 131-156

# **RGS19** Antibody (S151) - 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 131-156 amino acids from human RGS19.

**Dilution** WB~~1:1000 IHC-P~~1:10~50 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 (S151) is for research use only and not for use in diagnostic or therapeutic procedures.

## **RGS19** Antibody (S151) - 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 (S151) - 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 (S151) - Images



Western blot analysis of anti-RGS19 Antibody (S151) (Cat.#AP1820f) in mouse muscle tissue lysates (35ug/lane). RGS19(arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with Phospho-RGS19-pS151.ctrl 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.

# RGS19 Antibody (S151) - 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 (S151) - 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)