

RGS19 Antibody (Y143) Blocking Peptide
Synthetic peptide
Catalog # BP1820e**Specification**

RGS19 Antibody (Y143) Blocking Peptide - Product InformationPrimary Accession [P49795](#)**RGS19 Antibody (Y143) Blocking Peptide - Additional Information****Gene ID** 10287**Other Names**

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1820e](/products/AP1820e) was selected from the Y143 region of human RGS19. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RGS19 Antibody (Y143) Blocking Peptide - 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 (Y143) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

RGS19 Antibody (Y143) Blocking Peptide - Images

RGS19 Antibody (Y143) Blocking Peptide - 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 (Y143) Blocking Peptide - 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)