

RGS10 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP10125c**Specification**

RGS10 Antibody (Center) Blocking peptide - Product Information

Primary Accession [O43665](#)
Other Accession [NP_002916.1](#), [NP_001005339.1](#)

RGS10 Antibody (Center) Blocking peptide - Additional Information

Gene ID 6001

Other Names

Regulator of G-protein signaling 10, RGS10, RGS10

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.

RGS10 Antibody (Center) Blocking peptide - Protein Information

Name RGS10

Function

Regulates G protein-coupled receptor signaling cascades, including signaling downstream of the muscarinic acetylcholine receptor CHRM2. Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits, thereby driving them into their inactive GDP-bound form (PubMed: [10608901](http://www.uniprot.org/citations/10608901), PubMed: [11443111](http://www.uniprot.org/citations/11443111), PubMed: [18434541](http://www.uniprot.org/citations/18434541), PubMed: [8774883](http://www.uniprot.org/citations/8774883), PubMed: [9353196](http://www.uniprot.org/citations/9353196)). Modulates the activity of potassium channels that are activated in response to CHRM2 signaling (PubMed: [11443111](http://www.uniprot.org/citations/11443111)). Activity on GNAZ is inhibited by palmitoylation of the G-protein (PubMed: [9353196](http://www.uniprot.org/citations/9353196)).

Cellular Location

[Isoform 1]: Cytoplasm, cytosol. Nucleus Note=Forskolin treatment promotes phosphorylation and translocation to the nucleus.

RGS10 Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

RGS10 Antibody (Center) Blocking peptide - Images

RGS10 Antibody (Center) Blocking peptide - Background

Regulator of G protein signaling (RGS) family members are regulatory molecules that act as GTPase activating proteins (GAPs) for G alpha subunits of heterotrimeric G proteins. RGS proteins are able to deactivate G protein subunits of the Gi alpha, Go alpha and Gq alpha subtypes. They drive G proteins into their inactive GDP-bound forms. Regulator of G protein signaling 10 belongs to this family. All RGS proteins share a conserved 120-amino acid sequence termed the RGS domain. This protein associates specifically with the activated forms of the two related G-protein subunits, G-alpha13 and G-alpha2 but fails to interact with the structurally and functionally distinct G-alpha subunits. Regulator of G protein signaling 10 protein is localized in the nucleus. Two transcript variants encoding different isoforms have been found for this gene.

RGS10 Antibody (Center) Blocking peptide - References

Wang, J., et al. Carcinogenesis (2010) In press :Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010) :Yang, S., et al. J. Cell. Sci. 120 (PT 19), 3362-3371 (2007) :Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :Wang, A.G., et al. Biochem. Biophys. Res. Commun. 345(3):1022-1032(2006)