

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

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**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:<a href="http://www.uniprot.org/citations/8774883" target="\_blank">8774883</a>, PubMed:<a href="http://www.uniprot.org/citations/10608901" target="\_blank">10608901</a>, PubMed:<a href="http://www.uniprot.org/citations/9353196" target="\_blank">9353196</a>, PubMed:<a href="http://www.uniprot.org/citations/11443111" target="\_blank">11443111</a>, PubMed:<a href="http://www.uniprot.org/citations/18434541" target="\_blank">18434541</a>). Modulates the activity of potassium channels that are activated in response to CHRM2 signaling (PubMed:<a href="http://www.uniprot.org/citations/11443111" target="\_blank">11443111</a>). Activity on GNAZ is inhibited by palmitoylation of the G-protein (PubMed:<a href="http://www.uniprot.org/citations/9353196" target="\_blank">9353196</a>).

**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-alpha<sub>i3</sub> and G-alpha<sub>z</sub> 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)