

**RGS2 Blocking Peptide (N-term)**  
**Synthetic peptide**  
**Catalog # BP20183a****Specification**

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**RGS2 Blocking Peptide (N-term) - Product Information**

Primary Accession [P41220](#)  
Other Accession [NP\\_002914.1](#)

**RGS2 Blocking Peptide (N-term) - Additional Information**

**Gene ID** 5997

**Other Names**

Regulator of G-protein signaling 2, RGS2, Cell growth-inhibiting gene 31 protein, G0/G1 switch regulatory protein 8, RGS2, G0S8

**Target/Specificity**

The synthetic peptide sequence is selected from aa 19-32 of HUMAN RGS2

**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.

**RGS2 Blocking Peptide (N-term) - Protein Information**

**Name** RGS2

**Synonyms** G0S8

**Function**

Regulates G protein-coupled receptor signaling cascades. Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits, thereby driving them into their inactive GDP-bound form (PubMed: [11063746](http://www.uniprot.org/citations/11063746), PubMed: [19478087](http://www.uniprot.org/citations/19478087)). It is involved in the negative regulation of the angiotensin-activated signaling pathway (PubMed: [28784619](http://www.uniprot.org/citations/28784619)). Plays a role in the regulation of blood pressure in response to signaling via G protein-coupled receptors and GNAQ. Plays a role in regulating the constriction and relaxation of vascular smooth muscle (By similarity). Binds EIF2B5 and blocks its activity, thereby inhibiting the translation of mRNA into protein (PubMed: [19736320](http://www.uniprot.org/citations/19736320))

target="\_blank">19736320</a>).

**Cellular Location**

[Isoform 1]: Cell membrane. Cytoplasm. Nucleus, nucleolus [Isoform 3]: Cell membrane. Cytoplasm Nucleus, nucleolus

**Tissue Location**

Expressed in acute myelogenous leukemia (AML) and in acute lymphoblastic leukemia (ALL).

**RGS2 Blocking Peptide (N-term) - Protocols**

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

- [Blocking Peptides](#)

**RGS2 Blocking Peptide (N-term) - Images****RGS2 Blocking Peptide (N-term) - 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 2 belongs to this family. The protein acts as a mediator of myeloid differentiation and may play a role in leukemogenesis.

**RGS2 Blocking Peptide (N-term) - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)  
Wang, J., et al. Carcinogenesis 31(10):1755-1761(2010)  
Miyamoto-Matsubara, M., et al. Ann. N. Y. Acad. Sci. 1200, 112-119 (2010) :  
Li, N.F., et al. Clin. Exp. Hypertens. 32(5):256-261(2010)  
Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) :