RGS2 Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	RGS2, Blocking Peptide
Full Product Name	RGS2 Blocking Peptide
Product Gene Name	RGS2 blocking peptide
Product Synonym Names	Basic helix-loop-helix phosphoprotein G0S8; Cell growth inhibiting protein 31; Cell growth-inhibiting gene 31 protein; G0 to G1 switch regulatory 8 24kD; G0/G1 switch regulatory protein 8; G0S8; GOS8; OTTHUMP00000060765; Regulator of G protein signaling 2; Regulator of G protein signalling 2 24kD; Regulator of G-protein signaling 2; Regulators of G protein signaling XRGSVI; RGS 2; RGS2; RGS2_HUMAN
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	RGS2 peptide (MBS9625993) is used for blocking the activity of RGS2 antibody (MBS9607277)
Molecular Weight	20,780 Da
OMIM	600861
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for RGS2 blocking peptide	Blocking/Control
Related Product Information for RGS2 blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of RGS2 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for RGS2 purchase	MBS9625993 is a blocking peptide targeting RGS2.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for RGS2. It may not necessarily be applicable to this product.

NCBI GI #	4506517
NCBI GeneID	5997
NCBI Accession #	NP_002914.1
UniProt Primary Accession #	P41220

UniProt Secondary Accession #	Q6I9U5
UniProt Related Accession #	P41220
GenBank Nucleotide #	NM_002923.3
NCBI Official Full Name	regulator of G-protein signaling 2
NCBI Official Synonym Full Names	regulator of G-protein signaling 2
NCBI Official Symbol	RGS2
NCBI Official Synonym Symbols	G0S8
UniProt Protein Name	Regulator of G-protein signaling 2
UniProt Synonym Protein Names	Cell growth-inhibiting gene 31 protein; G0/G1 switch regulatory protein 8
Protein Family	Regulator of G-protein signaling
UniProt Gene Name	RGS2
UniProt Synonym Gene Names	G0S8; RGS2
UniProt Entry Name	RGS2_HUMAN
NCBI Protein Information	regulator of G-protein signaling 2; G0 to G1 switch regulatory 8, 24kD; G0/G1 switch regulatory protein 8; cell growth-inhibiting gene 31 protein; cell growth-inhibiting protein 31; regulator of G-protein signaling 2, 24kDa
NCBI Summary for RGS2	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. [provided by RefSeq, Aug 2009]
UniProt Comments for RGS2	RGS2: Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits thereby driving them into their inactive GDP-bound form. May play a role in leukemogenesis. Plays a role in negative feedback control pathway for adenylyl cyclase signaling. Binds EIF2B5 and blocks its activity, thereby inhibiting the translation of mRNA into protein. 4 isoforms of the human protein are produced by alternative initiation. Protein type: Nucleolus; GAPs, misc.; GAPs Chromosomal Location of Human Ortholog: 1q31 Cellular Component: internal side of plasma membrane; neuron projection; mitochondrion; cytoplasm; plasma membrane; nucleolus; cytosol Molecular Function: calmodulin binding; protein binding; beta-tubulin binding; GTPase activator activity Biological Process: regulation of translation; negative regulation of MAP kinase activity; relaxation of vascular smooth muscle; negative regulation of G-protein coupled receptor protein signaling pathway; positive regulation of microtubule polymerization; brown fat cell differentiation; spermatogenesis; cell cycle; regulation of G-protein coupled receptor protein signaling pathway; positive regulation of GTPase activity
Research Articles on RGS2	**1.** The results of this study are consistent previous results and support the hypothesis that polymorphic loci RGS2 gene associated with risk of extrapyramidal symptoms induced by typicalneuroleptics-haloperidol, and are involved in schizophrenia pathway.
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