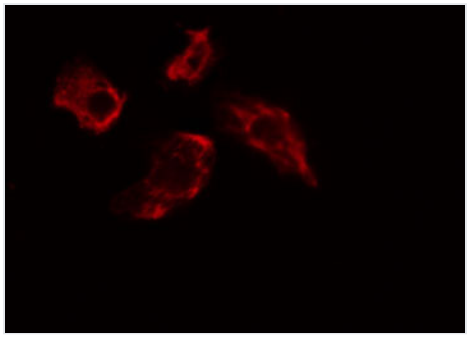
RGS7 Antibody – Rabbit Polyclonal

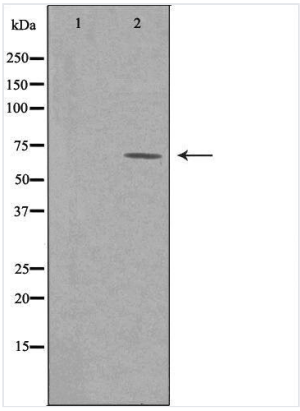
PRODUCT OVERVIEW

Product Name	RGS7, Polyclonal Antibody
Full Product Name	RGS7 Antibody
Product Gene Name	anti-RGS7 antibody
Product Synonym Names	OTTHUMP00000037994; Regulator of G protein signalling 7; Regulator of G-protein signaling 7; Regulator of G-protein signaling RGS7; Regulator of G-protein signalling 7
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Concentration	1mg/ml (lot specific)
Specificity	RGS7 antibody detects endogenous levels of total RGS7
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.
Antibody/Peptide Pairs	RGS7 peptide (MBS9624589) is used for blocking the activity of RGS7 antibody (MBS9605872)
Molecular Weight	Observed: 65 kD Predicted: 58 kDa
3D Structure	ModBase 3D Structure for P49802
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.
Immunogen	A synthesized peptide
Subcellular Location	Cytoplasmic
Conjugation	Unconjugated
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-RGS7 antibody	Western Blot (WB), Immunofluorescence (IF), Immunocytochemistry (ICC), ELISA (EIA)
Application Notes for anti-RGS7 antibody	WB: 1:500-1:1000 IF/ICC: 1:100-1:500

Related Product Information for anti-RGS7 antibody	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:10521509, PubMed:10862767). The RGS7/GNB5 dimer enhances GNAO1 GTPase activity (PubMed:10521509). May play a role in synaptic vesicle exocytosis (PubMed:12659861). Modulates the activity of potassium channels that are activated by GNAO1 in response to muscarinic acetylcholine receptor M2/CHRM2 signaling (PubMed:15897264). Subunit Structure: Interacts with PKD1; this prevents rapid proteasomal degradation (PubMed:10339594). Interacts with GNB5 (PubMed:10521509, PubMed:10339615). Interacts with RGS7BP, leading to regulate the subcellular location of the heterodimer formed with GNB5 (PubMed:15897264). Interacts (phosphorylated form) with 14-3-3 protein YWHAQ (PubMed:10862767). Interacts with SNAPIN (PubMed:12659861). Interacts with GNAI1 (PubMed:18434541). Interacts with GNAO1, GNAI3 and GNAZ (By similarity). Post-translational Modifications: Palmitoylated. Ubiquitinated, leading to rapid proteasomal degradation. Phosphorylation and subsequent interaction with 14-3-3 proteins inhibits GAP activity.
Other Notes	Small volumes of anti-RGS7 antibody 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 RGS7 purchase	MBS9605872 is an antibody targeting RGS7. Also known as RGS7 Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.



Immunofluorescence (IF) of anti-RGS7 antibody
MBS9605872 staining Hela cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



Western Blot (WB) of anti-RGS7 antibody
Western blot analysis of extracts from Jurkat cells, using RGS7 antibody.The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for RGS7. It may not necessarily be applicable to this product.

NCBI GI #	544346172
NCBI GeneID	6000
NCBI Accession #	NP_001269702.1
UniProt Primary Accession #	P49802
UniProt Secondary Accession #	Q5T3H4; Q8TD66; Q8TD67; Q8WW09; Q9UNU7; Q9Y6B9
UniProt Related Accession #	P49802
GenBank Nucleotide #	NM_001282773.2
NCBI Official Full Name	regulator of G-protein signaling 7 isoform 2
NCBI Official Synonym Full Names	regulator of G protein signaling 7
NCBI Official Symbol	RGS7
UniProt Protein Name	Regulator of G-protein signaling 7
Protein Family	Regulator of G-protein signaling

UniProt Gene Name	RGS7
UniProt Synonym Gene Names	RGS7
NCBI Protein Information	regulator of G-protein signaling 7
UniProt Comments for RGS7	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:10521509, PubMed:10862767). The RGS7/GNB5 dimer enhances GNAO1 GTPase activity (PubMed:10521509). May play a role in synaptic vesicle exocytosis (PubMed:12659861). Modulates the activity of potassium channels that are activated by GNAO1 in response to muscarinic acetylcholine receptor M2/CHRM2 signaling (PubMed:15897264).
Research Articles on RGS7	**1.** Data (including data from studies using transgenic mice) suggest that R7BP-RGS7 heterotrimers interact with Galpha13 to augment signaling pathways in neurons that regulate neurite morphogenesis. (R7BP = RGS7 family binding protein; RGS7 = regulator of G-protein signaling 7 protein; Galpha13 = GTP-binding protein alpha subunit 13)
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