

RGS7 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12015b**Specification**

RGS7 Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	P49802
Other Accession	NP_002915.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57668
Antigen Region	440-469

RGS7 Antibody (C-term) - Additional Information**Gene ID** 6000**Other Names**

Regulator of G-protein signaling 7, RGS7, RGS7

Target/Specificity

This RGS7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 440-469 amino acids from the C-terminal region of human RGS7.

Dilution

WB~~1:1000

IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

RGS7 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RGS7 Antibody (C-term) - Protein Information**Name** RGS7**Function** GTPase activator component of the RGS7-GNB5 complex that regulates G

protein-coupled receptor signaling cascades (PubMed:[10521509](#), PubMed:[10862767](#), PubMed:[31189666](#)). The RGS7-GNB5 complex acts as an inhibitor signal transduction by promoting the GTPase activity of G protein alpha subunits, such as GNAO1, thereby driving them into their inactive GDP-bound form (PubMed:[10521509](#), PubMed:[10862767](#)). May play a role in synaptic vesicle exocytosis (PubMed:[12659861](#)) (Probable). Glycine-dependent regulation of the RGS7- GNB5 complex by GPR158 affects mood and cognition via its ability to regulate neuronal excitability in L2/L3 pyramidal neurons of the prefrontal cortex (By similarity). Modulates the activity of potassium channels that are activated by GNAO1 in response to muscarinic acetylcholine receptor M2/CHRM2 signaling (PubMed:[15897264](#)).

Cellular Location

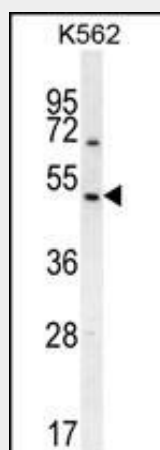
Cytoplasm, cytosol. Cytoplasm Cell membrane. Membrane; Peripheral membrane protein; Cytoplasmic side. Note=Interaction with PKD1 promotes location at the cell membrane (PubMed:10339594). Interaction with RGS7BP promotes location at the cell membrane (PubMed:15897264)

RGS7 Antibody (C-term) - Protocols

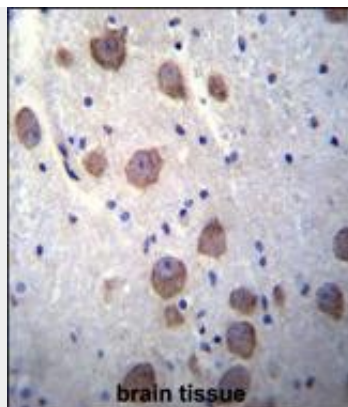
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

RGS7 Antibody (C-term) - Images



RGS7 Antibody (C-term) (Cat. #AP12015b) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the RGS7 antibody detected the RGS7 protein (arrow).



RGS7 Antibody (C-term) (Cat. #AP12015b) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of RGS7 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

RGS7 Antibody (C-term) - Background

RGS7 inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits thereby driving them into their inactive GDP-bound form. Activity on G(o)-alpha is specifically enhanced by the RGS6/GNG5 dimer. May play a role in synaptic vesicle exocytosis. May play important role in the rapid regulation of neuronal excitability and the cellular responses to short-lived stimulations (By similarity).

RGS7 Antibody (C-term) - References

Bailey, S.D., et al. Diabetes Care (2010) In press :
Wang, J., et al. Carcinogenesis (2010) In press :
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
McCauley, J.L., et al. Genes Immun. 10(7):624-630(2009)