For Research Use Only

RGS14 Polyclonal antibody

Catalog Number:16258-1-AP Featured Product 8 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
16258-1-AP

Size:
150ul , Concentration: 900 μg/ml by Nanodrop and 467 μg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG9292

GenBank Accession Number:
BC014094

GeneID (NCBI):
10636

UNIPROT ID:
O43566

Full Name:
regulator of G-protein signaling 14

Calculated MW:
566 aa, 61 kDa

Observed MW:
60-65 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:4000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:2500-1:10000

Applications

Tested Applications:
IHC, IP, WB, ELISA

Cited Applications:
CoIP, IF, IHC, IP, WB

Species Specificity:
human, mouse

Cited Species:
human, rat, mouse, monkey

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, mouse testis tissue, mouse brain tissue, mouse spleen tissue, HepG2 cells, HuH-7 cells, mouse liver tissue

IP : mouse brain tissue,

IHC : mouse brain tissue,

Background Information

RGS14, a member of the R12 subfamily of RGS proteins, is highly expressed in the brain and is a natural suppressor of CA2 hippocampal synaptic plasticity and learning and memory. RGS14 was first identified as a complex scaffolding protein with an unconventional domain structure that allows it to interact with various protein binding partners. RGS14 contains one RGS domain, two Raf-like Ras-binding domains (RBDs), and one GoLoco domain. The protein attenuates the signaling activity of G-proteins by binding, through its GoLoco domain, to specific types of activated, GTP-bound G alpha subunits. Acting as a GTPase activating protein (GAP), the protein increases the rate of conversion of the GTP to GDP.

Notable Publications

Author	Pubmed ID	Journal	Application
Mary Rose Branch	28934222	PLoS One	WB,IF
Katherine E Squires	33410399	J Biol Chem	WB, IF
Elif Cinar	32437708	Exp Neurol	IHC

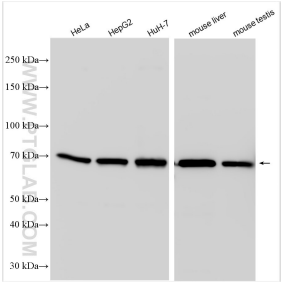
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

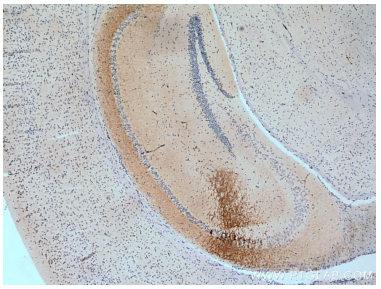
*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

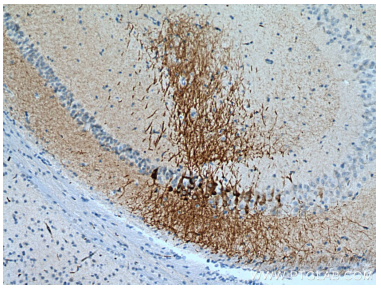
Selected Validation Data



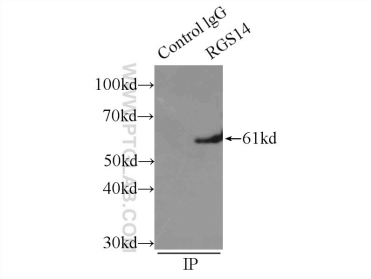
Various lysates were subjected to SDS PAGE followed by western blot with 16258-1-AP (RGS14 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 16258-1-AP (RGS14 antibody) at dilution of 1:5000 (under 4x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 16258-1-AP (RGS14 antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-RGS14 (IP:16258-1-AP, 3ug; Detection:16258-1-AP 1:1000) with mouse brain tissue lysate 5000ug.